# Highclare School


# Sixth Form

## A welcome from the Head of Sixth Form.

I am delighted to take this opportunity to introduce you to our Sixth Form at Highclare School. From the moment you walk through the door, you will begin to realise what a truly wonderful place Highclare School is.

Sixth Form is a most exciting time during which you will thrive and take charge of your own development as you become an independent young adult. We nurture each individual to reach their full potential, providing inspiring and focused teaching in an environment enjoying first class facilities and pastoral care. Academic progress is also carefully monitored, as is shown by the excellent results our students achieve year on year.

All members of the Sixth Form at Highclare School receive their own iPad to support learning and class sizes are kept deliberately small. There are opportunities for enrichment, trips both at home and abroad, and the annual sixth form pantomime is a highlight of the school calendar.

You are about to embark on an incredibly challenging but exciting two years, and I would be thrilled to welcome you to Highclare School Sixth Form to complete this important phase of your education.

Mr Stephen Parkinson
Head of Sixth Form

## Highclare Sixth Form

The Sixth Form at Highclare School offers a variety of courses to suit the needs of the individual student. Our aim is to deliver high quality teaching and support to ensure that students gain the necessary qualifications to facilitate progression to higher education or the world of work.

There are a wide range of A level subjects available, which are listed later in this document. We also encourage students to complete the Extended Project Qualification (EPQ) alongside A level choices. University offers are normally made on 3 A level grades or accumulated tariff points therefore students are normally expected to choose three subjects to study at A level plus an EPQ. It is also possible for a student to study a fourth A level subject if this is thought to be advantageous. When necessary, students may resit GCSE subjects and we will timetable for students to resit English or Mathematics if they did not achieve at least a grade 4 at GCSE.

Arrangements will be made for regular internal assessments to be taken over the two year duration of their courses to monitor progress. In addition to this, the teaching groups are small, giving teachers the benefit of close monitoring to ensure that each student achieves their highest academic potential. Our procedures ensure that difficulties are identified and dealt with speedily.

One of the strengths of the Sixth Form at Highclare is its flexibility. Each student is treated as an individual and his/her needs and requirements are catered for. As far as possible, the timetable is structured for the subject options of each student.

Students entering the Sixth Form will need to achieve at least five 9-4 grades or better at GCSE level. Preferred requirements for individual A Level subjects are shown in the A level course guide available with this document. With Highclare's flexible approach, each student is assessed and a suitable course structured to his or her needs. Full advice will be available to prospective students about the choice of subjects needed to follow particular careers and to gain entry into higher education. Advice will also be available for those who have a specific career in mind and for those who aim to seek employment after their Sixth Form course.

Highclare welcomes students from other schools and colleges. Students from other schools who are considering entry into Highclare's sixth form should contact the School as early as possible to discuss their choice of subjects.

The Sixth Form has its own suite of rooms in the Senior School, including a study centre, a common room and specialist study rooms. The Sixth Form is

small, informal and friendly and provides a pleasant atmosphere in which the students may develop and mature as they study for future goals. Students are encouraged to participate in Sport, ICT, Music and Drama. Those students whose timetable allows may also choose to participate in a community service placement. This provides valuable experience for the student and local organisations benefit from the enthusiasm and dedication of the students.

At Highclare, students enjoy good relationships with highly experienced, caring staff who are always available and willing to help and encourage them to achieve their full potential. In Highclare's sixth form we hope that every learner is an empowered learner and every day at school is an enriching experience. Our relationship with students is aimed at being supportive, caring and inspiring, and all staff work towards making the journey to high academic achievement an enjoyable one. All students will be encouraged to 'Take Charge' of their own independent learning (see subject guide).

We have an academic scholarship programme that is entirely based on merit (grade points achieved at GCSE) and open to anyone. When it comes to university application, we provide full support through our own staff and specialist teams from local universities. To this end, we have arranged an annual presentation, delivered by a sitting university professor, to the Upper Sixth about what to expect at university and how students may overcome any difficulties or anxieties they may have in going to university for the first time.

Since so much of what we do is about preparing for university and beyond; and because we know that travel broadens the mind, an annual £1,000 travel bursary is available to any member of the Sixth Form who has an exciting plan and can write a sufficiently compelling case for support.

Sixth Form students choose to study three or four A levels from the following wide choice of subjects:

- Applied Science
- Art and Design
- Biology
- Business Studies
- Chemistry
- Computer Science
- Drama and Theatre
- English Literature
- French
- Geography
- German
- History
- Law
- Mathematics
- Music
- Photography
- Physical Education
- Physics
- Psychology
- Religious Studies
- Sociology
- Spanish

Also: Extended Project

For more information about enrolling in Highclare Sixth Form, please contact admissions:

**Tel: 0121 386 8218 / 373 7400**
**Email: admissions@highclareschool.co.uk**
**www.highclareschool.co.uk**

# Highclare School

# A Level Guide

**September 2021**

**Contents:**

| | |
|---|---|
| **Subject:** Applied Science[1] | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Dudley | **Teachers:** Mrs Dudley, Ms Sehra, Dr Dheer |

Preferred entry requirements:
Grade 5 or above in GCSE Biology, Chemistry, Physics or Combined Science

## Specification Content

| | Year 1 | | Year 2 |
|---|---|---|---|
| **1** | Key concepts in science (written examination) | **1** | The human body (written examination) |
| **2** | Applied experimental technique (portfolio) | **2** | Investigating science (portfolio) |
| **3** | Science in the modern world (written examination) | **3** | Options: microbiology, medical physics or organic chemistry (portfolio) |

### Structure of the course:

The Level 3 Extended Certificate in Applied Science consists of six units, of which five are compulsory and is the equivalent of an A Level. In year 1 of the course students will cover scientific principles associated with the application of biology, chemistry and physics, research into the roles and skills of scientists, and the public and media perception of science. Year 2 builds on their knowledge and develops scientific practical skills recognised by higher education institutions and employers to be the most important. The optional module allows pupils the opportunity to explore a wider range of applied learning following a particular pathway either biological, chemical or physical.

### Methodology:

Teaching is structured to allow students to further develop ideas met at GCSE. Students are expected to work independently by tackling questions and carrying out practical tasks. The nature of the course places emphasis on transferable skills so they will need to develop their problem solving and communication of their research. None of the numerical skills for this certificate require any methodology beyond GCSE Mathematics. Assessment is a mixture of internally and externally-assessed units. Externally-assessed units are by written examination. Internally-assessed portfolios are externally moderated by AQA. Units are graded as pass, merit or distinction (P,M,D or D*) with a D* attracting the same number of UCAS points as an A* at A Level. Pupils must pass each unit in order to pass the qualification.

### Strengths/Skills developed through studying this subject:

The qualification offers students an opportunity to develop transferrable skills, research and communication as part of their applied learning. The ability to communicate in a clear, accurate, logical and coherent manner and to use appropriate vocabulary will also be developed. Numeracy skills will be further developed in a contextual manner. The applied purpose demands authentic work-related learning in each of the units. The applied aspect will also enable students to learn in such a way that they develop skills required for independent learning and development such as the ability to solve problems, the skills of project-based research, development and presentation, the ability to apply mathematical and ICT skills and the ability to apply learning in vocational contexts.

### What students do with this qualification:

Employers recognise scientists as people of intelligence and ability. Applied Science can lead to further study in a vast spectrum of interesting fields: environment, space, transport, computing, medicine, economics and finance. The course has been developed with a wide range of higher education institutions to ensure that the best possible progression opportunities are available to courses at BSc degree level. As this qualification contains both examined and assignment-based assessment, the students are well prepared to adjust to higher-educational study.

[1] L3 Extended Certificate

| **Subject:** Art, Craft & Design | **Awarding Body:** Edexcel |
|---|---|
| **Head of Dept:** Mrs Stott | **Teachers:** Mrs Stott |

Preferred entry requirements: Grade 6 or above in Art, Craft & Design, Fine Art or Photography at GCSE

## Specification Content

| **A level** | |
|---|---|
| **1** | **Personal Investigation and Personal Study**<br>Internally set and assessed. Externally moderated. (60% of the total qualification) |
| **2** | **Externally Set Assignment (ESA)**<br>Externally set, internally assessed and externally moderated. (40% of the total qualification) |

### Structure of the course:

Students have the opportunity to experiment with materials and techniques and make the transition from GCSE to A-Level in the first term of the course. They will then choose a topic for their major project (Component 1) with guidance from the teacher.

**Component 1** - **Personal Investigation (coursework) and Personal Study (written component):** This component allows students opportunities to generate and develop ideas, research primary and contextual sources, record practical and written observations, experiment with media and refine ideas towards producing personal resolved outcome(s). It incorporates 3 major elements: practical work, supporting studies and a written study in a minimum of 1,000 words of continuous prose.

**Component 2 - Externally Set Assignment (ESA):** Students are asked to create supporting studies and personal outcome(s) in response to an externally set theme. The release date of the ESA is 1st February in year 2 and contains suggested starting points. Students have from the 1st February and the commencement of the final concluding 15-hour period of sustained focus to develop preparatory studies. The 15-hour period of sustained focus takes place under examination conditions.

### Methodology:

The visual arts provide a rich and varied opportunity for study at A Level and the course aims to reflect this by building on each individual student's areas of interest and strengths. Students are guided via individual tutorials and the coursework tasks facilitate a personal and professional response in a range of media. The course allows for experimentation in a host of disciplines with the flexibility to explore and specialize in a particular area of interest. Critical/contextual links underpin the practical tasks.

### Strengths/Skills developed through studying this subject:

Recording, research, presentation and communication skills are developed through the study of Art at A Level. Students learn to operate independently and creatively. They gain the attributes to allow them to express judgments about their own work and the work of others and apply this knowledge to move their work forward.

### What students do with this qualification:

Students completing an A Level in Art, Craft & Design will then have access to Art Foundation courses and Degrees in a wide range of Art and Design disciplines, including; Photography, Fine Art, Visual Communication, Graphic Design, Animation, Illustration, Interior Design, Fashion Design, Product Design, or teaching in schools or colleges. Students may also gain entry onto an equally wide range of vocational courses, which include industrial placement.

| | |
|---|---|
| **Subject:** Biology | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Dudley | **Teacher:** Dr Dheer |

Preferred entry requirements:
Grade 6 or above in GCSE Biology or Combined Science

## Specification Content

| **A level** | Year 1 | | Year 2 |
|---|---|---|---|
| **1** | Biological molecules | **5** | Energy transfers in and between organisms |
| **2** | Cells | **6** | Organisms respond to changes in their internal and external environments |
| **3** | Organisms exchange substances with their environment | **7** | Genetics, populations, evolution and ecosystems |
| **4** | Genetic information, variation and relationships between organisms | **8** | The control of gene expression |

### Structure of the course:

The A level qualification will involve the study of eight topics as outlined above. Topics 1-4 will be assessed during a two-hour written paper, which will include short and long answer questions. Topics 5-8 will also be assessed in a two-hour written paper with short and long answer questions and a comprehension question. A third written paper will assess any content from all eight topics and will include critical analysis of experimental data and an essay from a choice of two essay titles. As practical work is at the heart of Biology, students will have numerous opportunities to carry out practicals which support the theory. There are twelve required practical activities which will be assessed on the three written papers and there will also be an endorsement of practical skills, which will be teacher assessed throughout the course. The qualification is linear so students will sit all the A level examinations at the end of the two year course.

### Methodology:

Many of the lessons will be well structured with teacher-led discussion and note-taking, but a variety of other teaching methods will be used to ensure that students are actively involved in learning throughout the course and can work independently when required. A range of practical work will be carried out throughout the course to allow development of practical and investigative skills.

### Strengths/Skills developed through studying this subject:

Throughout the A level course students learn skills that allow them to communicate using appropriate biological terminology, analyse, criticise, argue and discuss. Practical and investigative skills are developed including the ability to pose and define scientific problems, select appropriate apparatus and methods, analyse and interpret data and evaluate their methodology, evidence and data.

### What students do with this qualification:

Many students who study A level Biology go on to study Biology related courses at University including Medicine, Dentistry, Veterinary Science, Pharmacology, Physiotherapy, Biomedical Science, Biology and Biochemistry. However, the skills learnt throughout the A level course mean that students tend to be numerate and literate and able to present information in a variety of different ways. These are invaluable skills for any degree discipline or area of work.

| | |
|---|---|
| **Subject:** Business Studies | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Green | **Teachers:** Mrs Green, Mrs Roberts |

Preferred entry requirements: Grade 5 or above in GCSE Maths and English

## Specification Content

| **Year 1** | June Year 1 | **Year 2** | May/June Year 2 |
|---|---|---|---|
| | The first year looks at managing, leading and decision-making, particularly with reference to improving performance in marketing, operations, human resources and finance. | | The A level qualification incorporates the same topics as the first year course plus strategic decision-making. |
| **Paper 1** | Multiple choice questions, short answer questions and data response questions. | **Paper 1** | Multiple choice questions, short answer questions and an essay question. |
| **Paper 2** | Three multi-part data response questions. | **Paper 2** | Three multi-part data response compulsory questions. |
| | | **Paper 3** | Compulsory questions based on one case study. |
| | Year One assessment is by two one-and-a-half hour written examinations at the end of the course. | | The A level is assessed by three two hour written examinations at the end of the course. |

### Structure of the course:

Students will study 'business' in a variety of contexts, eg large and small businesses, UK focused and global operations, manufacturing and services businesses. The topics lend themselves to studying and engaging with the business world and students are encouraged to follow business developments and think critically about contemporary business issues. This A level specification is taken over two years with all the assessment taken at the end of the course.

### Methodology:

Within the classroom we use a variety of teaching methods, including reference to the prescribed AQA textbook, ebooks and iPad applications, the use of handouts, case studies, class discussions and presentations. Students are required to use a range of both primary and secondary information including websites to support their studies. They are also encouraged to visit the central library, read appropriate newspapers, listen to suitable business podcasts and watch reliable and recommended television programmes.

### Strengths/Skills developed through studying this subject:

The course encourages students to acquire a range of important and transferable skills. Students are expected to manipulate data in a variety of forms and to interpret their results; they will present arguments, make judgments and justify their recommendations on the basis of available evidence; they will solve problems and make decisions using appropriate business tools and methods and they will plan work, taking into account the demands of the task and the time available to complete it.

### What students do with this qualification:

The course offers a valuable understanding of the complex world of business, commerce and enterprise and aims to promote awareness and understanding of business related issues and to equip students with skills that are relevant beyond the classroom. The qualification provides a suitable foundation for the study of Business or related courses in Higher Education. It is also suitable for candidates intending to pursue a career in business, or further study in business, social sciences or as part of general education; all careers benefit from a sound knowledge of how a business operates.

| | |
|---|---|
| **Subject:** Chemistry | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Dudley | **Teachers:** Ms Sehra, Miss Hopkins |

Preferred entry requirements:
Grade 6 or above in GCSE Chemistry or Combined Science

## Specification Content

| **A level: Assessment** | |
|---|---|
| **Paper 1** | Physical chemistry, inorganic chemistry and relevant practical skills.<br>2 hour written examination; 35% of A level |
| **Paper 2** | Physical chemistry, organic chemistry and relevant practical skills.<br>2 hour written examination; 35% of A level |
| **Paper 3** | Any relevant content and practical skills.<br>2 hour written examination; 30% of A level |

### Structure of the course:

The course covers the three important areas of chemistry: physical, inorganic and organic. All three areas will be covered during Year 1 with many areas being revisited in Year 2 of the course. In Year 2, knowledge, understanding and skills are developed further, requiring deeper understanding of the concepts already covered. A level Chemistry involves a good deal of practical work to which a significant amount of time is devoted and the skills gained through carrying out practical tasks during the course will be examined in Paper 3, with some relevant skills also being examined in Paper 1 and 2. Teacher assessed practical skills and 12 required practical activities are incorporated into the course leading to a practical endorsement.

### Methodology:

Teaching is well structured to allow students to further develop ideas met at GCSE Chemistry. Students will be expected to work collaboratively and independently by tackling questions and exercises which stretch them to the limits of their abilities. There are opportunities for students to produce presentations to enhance their learning and modelling of concepts will be used to help with the understanding of more challenging aspects of the course. Practical work will form an integral part of the course and will link into theoretical work at all stages.

### Strengths/Skills developed through studying this subject:

Students will improve their understanding of Chemistry and its importance in today's society. They will begin to understand the mechanisms of chemical reactions and why structure and bonding in a substance determines its physical and chemical properties. Students will learn to develop logical thought, problem solving and will improve their mathematical skills. Practical skills and manual dexterity will be improved by learning how to manipulate sensitive and accurate pieces of apparatus to obtain precise results.

### What students do with this qualification:

Chemistry is an important qualification for any medical or scientific career. It is often a pre-requisite for some courses so prospective students should check to see if they definitely need Chemistry for a particular course. Forensic science, criminal law, architecture, materials science, engineering, dentistry, medicine, physiotherapy, pharmacy, ophthalmology, dietetics are some of the many vocational courses which may require an A Level Chemistry qualification.

| **Subject:** Computer Science | **Awarding Body:** OCR |
|---|---|
| **Head of Dept:** Mr Sneary | **Teachers:** Mr Sneary |

Preferred entry requirements: Grade 6 or above in GCSE Computer Science

## Specification Content

**A level**

**01 COMPUTER SYSTEMS**
Computer Systems will cover the characteristics of contemporary systems architecture and other areas including the following: The characteristics of contemporary processors, input, output and storage devices • Software development • Exchanging data • Data types, data structures and algorithms • Legal, moral, cultural and ethical issues.

**02 ALGORITHMS AND PROGRAMMING**
Elements of computational thinking • Programming and problem solving • Pattern recognition, abstraction and decomposition • Algorithm design and efficiency • Standard algorithms.

**03 PROGRAMMING PROJECT**
Students and/or centres select their own user-driven problem of an appropriate size and complexity to solve. Students will need to analyse the problem, design a solution, implement the solution and give a thorough evaluation.

## Structure of the course:

| | Component | Assessment | Weighting | Marks and duration |
|---|---|---|---|---|
| **A Level** | 01 Computer systems | Externally marked question paper | 40% | 140 marks / 2 hr 30 mins |
| | 02 Algorithms and programming | Externally marked question paper | 40% | 140 marks / 2 hr 30 mins |
| | 03 Programming project | Externally moderated | 20% | 70 Marks |

## Methodology:

This course will be relevant to the modern and changing world of computing. It will focus on programming, building on GCSE Computing and emphasising the importance of computational thinking as a discipline. It will have an expanded maths focus, much of which will be embedded within the course. Students will be able to apply the academic principles learned in the classroom to real world systems in an exciting and engaging manner.

## Strengths/Skills developed through studying this subject:

Students will gain an understanding and ability to apply the fundamental principles and concepts of computer science, including: abstraction, decomposition, logic, algorithms and data representation. They will have the ability to analyse problems in computational terms through practical experience of solving such problems, including writing programs to do so.

## What students do with this qualification:

In addition to their other A level subjects, students completing A Level Computer Science will then have access to Computer Science/ Computing or IT related degrees at University. Typical careers for computer scientists include IT Consultant, Software Developer and Multimedia Programmer to name but a few.

| **Subject:** Drama and Theatre | **Awarding Body:** OCR |
|---|---|
| **Head of Dept:** Mrs Sharman-Everton | **Teachers:** Mrs Sharman-Everton |

Preferred entry requirements: Grade 6 or above in GCSE Drama

## Specification Content

| **A level** | | **Marks** |
|---|---|---|
| Component 1<br>Practitioners in Practice | Devising a performance using a set text and two theatre practitioners as stimuli. Designer and performer routes available. | 40% of total A level<br>120 marks<br>Internally Assessed |
| Component 2<br>Exploring and Performing Texts | A monologue/duologue or group performance/design realisation of one key extract from a text. | 20% of total A level<br>60 marks<br>Externally assessed |
| Component 3<br>Analysing Performance | A live theatre evaluation, exploration and realisation of two contrasting performance texts. | 20% of total A level<br>60 marks<br>Externally assessed |
| Component 4<br>Deconstructing Texts for Performance | Learners will interpret and explore practically a performance text and prepare it for an audience. | 20% of total A level<br>60 marks<br>Externally assessed |

### Structure of the course:

**Component 1 – Practitioners in Practice:** Students will develop their creative and exploratory skills to devise an original performance. The starting point for this devising process will be an extract from a performance text and two influential theatre practitioners.
**Component 2 – Exploring and Performing Texts:** Students will study a key extract from a text and perform to an audience. Students may complete this component either as a performer or as a designer
**Component 3 –Analysing Performance:** This component requires students to consider, analyse and evaluate how different theatre makers create impact whilst watching live theatre.
**Component 4 – Deconstructing Texts for Performance:** Students will practically study a performance text learning how writer's intention can be manipulated to communicate meaning to an audience.

### Methodology:

The course is designed to include practical and theoretical aspects of Drama. Students work individually and in small groups to devise, direct, design, perform, analyse and evaluate performance. The content encourages students to develop their strengths and allows students to specialise in particular areas of interest.

### Strengths/Skills developed through studying this subject:

Students will develop performance, technical and analytical skills through the study of A level Drama. They will have the opportunity to develop skills as a theatre maker and develop the ability to evaluate, analyse and critique live theatre. Students will develop collaborative working methods, communication and the ability to amend and refine work which are all transferrable skills that help make a smooth transition to the next level of study or employment

### What students do with this qualification:

Students completing an A level in Drama and Theatre will have access to Drama schools and university courses that relate directly to performance or stage management. University courses that benefit from the skills acquired in Drama and Theatre will also benefit from students taking this qualification. For example law, human resources, people management. The course also develops people skills, time management, confidence, the ability to work collaboratively and would be beneficial for employment where these skills are desirable.

| | |
|---|---|
| **Subject:** English Literature | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Dawson | **Teachers:** Mrs Dawson, Mr Ghag, Mrs Moore |

Preferred entry requirements:
Grade 6 or above in GCSE English Language and English Literature

## Specification Content

## A level

| | | | |
|---|---|---|---|
| Year 1<br><br>**1** | **Love Through The Ages:**<br><br>Introduction to English Literature<br><br>Shakespeare play.<br><br>Unseen love poetry<br><br>NEA preparation for Independent Critical Study | Year 2<br><br>**3** | **Love Through the Ages**: one poetry, one prose text and one Shakespeare play. Unseen poetry and set texts. Written Paper 40% 3 hours Open book in section C only. |
| | | **4** | **Texts in Shared Contexts either WW1 or 1945 to present**. One prose, one drama and one poetry text. Unseen prose and set texts. 40% 2 hours and 30 minutes. Open book. |
| **2** | **Love Through The Ages:**<br>One prose text.<br><br>Pre or post 1900 love poetry anthology. | **5** | **Non-Examined Assessment: Texts across Time**<br>20%. Word count: 2500 words. Two different authors must be studied including one before 1900. |

## Structure of the course:

(Year 2) Love Through The Ages: 1 prose, 1 poetry anthology, 1 Shakespeare text and unseen poetry.
Texts in Shared Context: WW1: 1 prose, 1 drama, 1 poetry text and unseen prose.
Non Examined Assessment: Texts Across Time. 2500 words.
(Year 1) Intro to English Literature
Love Through the Ages: study of 1 prose text; Shakespeare text and a poetry anthology. NEA.

## Methodology:

The aims of the course are to enable students to enjoy reading, discussing and writing about English Literature. The emphasis is on getting to know a wide range of texts in depth, by close reading and written response. At the same time, students will be encouraged to study the contexts in which these texts were written. A range of teaching and learning strategies is employed to engage students in the study of literature from teacher-led discussion to group work and individual research tasks. We will endeavour to go on theatre visits and relevant trips when the opportunities arise.

## Strengths/Skills developed through studying this subject:

It is essential that students who are contemplating studying English Literature at A level should enjoy reading and be prepared to read a wide range of texts independently. Students will be given the opportunity to develop their analytical, essay writing and vocabulary skills, thereby enabling them to write in some detail for coursework (re-drafting is permitted). Timed written work also forms an important part of the course in preparation for the examinations. Students will also be expected to take part in class discussions in order to develop independent views, logical argument and self-confidence.

## What students do with this qualification:

English Literature combines well with most A level subjects and a qualification in this subject provides a very wide range of opportunities for courses in the Arts, Humanities and Communication at degree level. Competition for places to read English at degree level is strong and most universities also require a modern language at GCSE grade 4/5 or above. English is a subject which emphasises creativity, disciplined thought, communication and an ability to contextualise and synthesise ideas.

| | |
|---|---|
| **Subject:** French | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Lightfoot | **Teachers:** Mrs Pupino & Ms Palmer |

Preferred entry requirements: Grade 6 or above in GCSE French

## Specification Content

| **A level** | |
|---|---|
| Year 1 | Listening, Reading and Writing: 1) Aspects of French speaking society 2) Artistic culture in the French speaking world 3) Translation into English<br>Writing: 1) One text or film from the specification 2) translation into French<br>Speaking |
| Year 2 | Listening, Reading and Writing: 1) Multiculturalism in French speaking society 2) Aspects of political life 3) Translation into the target language<br>Writing: One text and one film or two texts<br>Speaking: Individual research project |

### Structure of the course:

Year 1 Core Content – Social issues and trends, artistic culture and grammar.
Options – Choice of one book or one film to study
Year 2 Core Content – Social issues and trends, artistic culture and grammar.
Options – Choice of two books or one book and one film to study
Examinations: Paper 1 Listening, Reading and Writing (2 hours) 40% of A level
Paper 2 Writing - Literature & Film (2 hours 40 minutes) 30% of A level
Paper 3 Speaking (21-23 minutes) 30% of A level

### Methodology:

Within the classroom pupils will develop their skills in the language using a variety of resources. They will listen to a range of authentic recorded language material to enable them to retrieve and convey information. Students will be required to read and respond to a variety of language written texts. There will be much emphasis on developing oral skills within lessons and expressing opinions on a variety of topics. Pupils will acquire a sound knowledge of grammar during the course so that they can communicate accurately.

### Strengths/Skills developed through studying this subject:

Students should develop an interest in and enthusiasm for language learning, as well as an understanding of the language. They will learn to communicate confidently, clearly and effectively in the language. During the course students will also develop an awareness and understanding of the society, cultural background and heritage of the countries where their chosen language is spoken.

### What students do with this qualification:

Some students use the qualification to study a language at University or may combine it with another subject such as Law, Business, Accountancy or another language. Universities are very keen to see that a student has studied a language to a high level, even if he or she applies for an unrelated course. Knowledge of a language will improve employment opportunities either in the UK or abroad, for example, in marketing or working as a lawyer, accountant, engineer, journalist or designer. Students will also be able to communicate with people who also speak the language at home or abroad. Travelling abroad will be a lot more interesting!

| | |
|---|---|
| **Subject:** Geography | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Cassell | **Teachers:** Mrs Cassell, Mrs Palmer |

Preferred entry requirements: Grade 6 or above in GCSE Geography
If students have not studied GCSE Geography, a discussion with the Head of Department is necessary.

## Specification Content

| Year 1 | Year 2 |
|---|---|
| **Physical** theme – Coasts (Landscape systems)<br><br>H**uman** themes – Changing places and Contemporary urban environments<br><br>**Geographical fieldwork investigation**: we have a residential fieldwork course in Year 1 and carry out a variety of local fieldwork skills projects. This prepares students of the individual investigation and supports the teaching of the course. | **Physical themes**: Hazards, Water and carbon cycles<br><br>**Human themes:** Global systems and global governance<br><br>**Independent investigation** (using both fieldwork and research) – up to 4,000 words.<br>**Field work –** a minimum of four days fieldwork is required for A level Geography – the individual investigation and the residential visit in Year 1 allow for this. |

### Structure of the course:

**T**he course is assessed through two examination papers (each 2 hours 30 minutes) and a written independent investigation. Question types include data response, extended writing and essay questions. The course includes an even mixture of both physical and human geography. 80% of the A level grade is from the two examinations, the final 20% is from the independent investigation.

### Methodology:

Learning in Geography is as varied as the subject itself. Students think, engage in debate, watch geographical programmes and research geographical issues. They carry out fieldwork so that statistical and fieldwork techniques can be practised. This has included trips to London, Manchester, Sorrento, Sicily and Iceland in the last couple of years, as well as paddling in local streams and investigating the changing characteristics of the local area. This new course requires a minimum of 4 days fieldwork and may include a UK residential visit to a specialist fieldwork centre during the course and a series of more local fieldwork days. Students make use of ICT and map skills throughout the course; the iPad is an essential research and learning tool for every lesson. At A level the independent investigation involves research and fieldwork and builds on the skills developed in L6. Students follow geographical events and enjoy becoming knowledgeable about geographical current news events relevant to their studies.

### Strengths/Skills developed through studying this subject:

Skills learnt in Geography are highly valued in further education and by employers. Students develop and apply their understanding of geographical concepts and processes to understand and interpret our changing world. They develop their awareness of the complexity of interactions within and between societies, economics, cultures and environments at scales from local to global. By studying contemporary geographical issues an appreciation of a range of moral, ethical, social and cultural issues are engendered. Students develop fieldwork and ICT skills to further enhance their studies. Geographers are able to discuss, research, think and analyse.

### What students do with this qualification:

Students can do almost anything with this qualification! It is studied at degree level by many who are not too sure of their future career aspirations, knowing that it will keep their options open. It can be studied as an Arts or a Science degree and there are many different options available at degree level. Careers include cartography, human resources, working in the energy industry, teaching, refugee advisors, charity work, forestry, meteorology, civil engineering, social work, estate agency, travel agency, law, banking and chartered accountancy. A recent study showed that Geography graduates had the lowest unemployment rate of any other subject.

| | |
|---|---|
| **Subject:** German | **Awarding Body:** Edexcel |
| **Head of Dept:** Mrs Lightfoot | **Teacher:** Mrs Lightfoot |

Preferred entry requirements: Grade 6 or above in GCSE German

## Specification Content

| **A level** | |
|---|---|
| **Year 1** | Listening, Reading and Writing: 1) Aspects of German speaking society 2) Artistic culture in the German speaking world 3) Translation into English<br>Writing: One text or film from the specification<br>Speaking |
| **Year 2** | Listening, Reading and Writing: 1) Multiculturalism in the German speaking society 2) Aspects of political life 3) Translation into the target language<br>Writing: One text and one film or two texts<br>Speaking: Individual research project |

### Structure of the course:

Year 1 Core Content – Social issues and trends, artistic culture and grammar.
Options – Choice of one book or one film to study
Year 2 Core Content – Social issues and trends, artistic culture and grammar.
Options – Choice of two books or one book and one film to study
Examinations: Paper 1 Listening, Reading and Writing (2 hours) 40% of A level
Paper 2 Writing - Literature (2 hours 40 minutes) 30% of A level
Paper 3 Speaking (21-23 minutes) 30% of A level

### Methodology:

Within the classroom pupils will develop their skills in the language using a variety of resources. They will listen to a range of authentic recorded language material to enable them to retrieve and convey information. Students will be required to read and respond to a variety of language written texts. There will be much emphasis on developing oral skills within lessons and expressing opinions on a variety of topics. Pupils will acquire a sound knowledge of grammar during the course so that they can communicate accurately. They also have the opportunity to take part in a week long work experience in Germany.

### Strengths/Skills developed through studying this subject:

Students should develop an interest in and enthusiasm for language learning, as well as an understanding of the language. They will learn to communicate confidently, clearly and effectively in the language. During the course students will also develop an awareness and understanding of the society, cultural background and heritage of the countries where their chosen language is spoken.

### What students do with this qualification:

Some students use the qualification to study a language at University or may combine it with another subject such as Law, Business, Accountancy or another language. Universities are very keen to see that a student has studied a language to a high level, even if he or she applies for an unrelated course. Knowledge of a language will improve employment opportunities either in the UK or abroad, for example, in marketing or working as a lawyer, accountant, engineer, journalist or designer. Students will also be able to communicate with people who also speak the language at home or abroad. Travelling abroad will be a lot more interesting!

| | |
|---|---|
| **Subject:** History | **Awarding Body:** OCR |
| **Head of Dept:** Miss Watson | **Teacher:** Miss Watson |

Preferred entry requirements: Grade 6 or above in GCSE History

## Specification Content

| A level (Year 1 - Lower Sixth) | | A level (Year 2 - Upper Sixth) | |
|---|---|---|---|
| **1** | Lancastrians, Yorkists and Tudors 1455-1509 (1 hour 30 minute examination) | **3** | Russia and its Rulers, 1855-1964 (2 hour 30 minute examination) |
| **2** | The French Revolution and the Rule of Napoleon, 1774-1815 (1 hour examination) | **4** | You will complete a 3-4,000 word piece of coursework on any relevant topic of your choice |

### Structure of the course:

In this **two year History A level course** the first unit of study will be the Lancastrians, Yorkists and Tudors. This unit gives you the opportunity to study an exciting period of English history where rival families quarrelled over the crown of England, where battles were frequently fought and where Kings were murdered and overthrown on a regular basis. Secondly, you will study the French Revolution during which the French King was executed and France entered a time of great chaos, terror and violence. In the second year you will look at the development of Russia over the years 1855-1964, from the rule of the Russian Tsars (kings) to the outbreak of revolution in 1917 and the emergence of one of the most brutal of the 20th century dictators - Stalin. You will also complete a piece of coursework on any historical topic, time period or country of your choice – this is your chance to choose whatever you want to study.

### Methodology:

The History Department employs a range of different teaching methods to help you learn (and enjoy learning) the topics studied at A level. You will be expected to write essays and answer source questions as essential preparation for the examinations, but you will also have the opportunity to take part in role-plays, debates, historical re-enactments, presentations and decision-making exercises. There is also the opportunity to go on trips as part of the course. History students have been on a number of trips in the last few years including spending a day at Bosworth Battlefield re-enacting medieval warfare with the aid of some plastic swords and real medieval armour, a day at Ludlow Castle and visiting the Tower of London.

### Strengths/Skills developed through studying this subject:

A level History helps you to:
-Develop a wide range of skills including the ability to gather and select relevant information and to communicate your ideas effectively both verbally and in writing.
-Develop your analytical skills - you will learn to assess why events happen and what the consequences of events and decisions are; these are useful skills which are valued by universities and employers.
-Develop your organisational skills. You will learn to present and organise your views in a logical and effective manner as well as improving your study skills as you will be required to complete coursework, to set deadlines and undertake extra research and reading.

### What students do with this qualification:

History is well respected by Universities and is useful for a whole range of Higher Education courses as you can apply the analytical and investigative skills learnt in A level History to many different areas of study. A level History can prove beneficial to a wide variety of careers. Past History A level students from Highclare have gone on to study a range of subjects at University including Law, Business, Archaeology and, of course, History.

| | |
|---|---|
| **Subject:** Law | **Awarding Body:** OCR |
| **Head of Dept:** Mrs Green | **Teacher:** Mrs Stead |

Preferred entry requirements: Grade 5 or above in GCSE English

## Specification Content

| **A level** | | | |
|---|---|---|---|
| **1** | The legal system and Criminal law<br>2 hour paper 33.3% of total A level | **3** | The Nature of Law<br>Human rights law ***or*** The law of contract<br>2 hour paper 33.3% of total A level |
| **2** | Law making and the law of tort.<br>2 hour paper 33.3% of total A level | | |
| Will there be any coursework? No | | | |

### Structure of the course:

'The legal system' covers all aspects of the civil courts and other forms of dispute resolution, criminal courts and lay people, legal personnel and access to justice. Under 'criminal law', you will study the general elements of criminal liability, fatal and non-fatal offences, offences against property, mental capacity defences and general defences and preliminary offences. The second paper will include Parliamentary law making, including delegated legislation, statutory interpretation precedent, law reform and EU law. The law of tort includes negligence, occupier's liability, land, vicarious liability, defences and remedies. The third component concerns the nature of law and morality, justice and society. A choice can be made to study the law of contract or human rights law.

### Methodology:

As well as the traditional methods of teaching within the classroom through discussion, using prescribed textbooks specific to the course, taking notes, giving small informal presentations etc students are encouraged to carry out their own research from textbooks in the school library. A number of appropriate websites may also be accessed to find the most up to date material.

Students will visit a Magistrates Court, Crown Court and, if time permits, County and High Court. On occasions, students may be invited to visit other courts which may include The Supreme Court in Westminster. We have even had a trip to the Electric Cinema to watch 'The Children Act'.

Law students are also encouraged to develop awareness of topical issues by listening to the news and reading newspapers. The success in this subject largely depends on developing independent learning and actively applying law to everyday life.

### Strengths/Skills developed through studying this subject:

Students develop knowledge and understanding of the structure, personnel and function of a legal system. This enhances an awareness of political and constitutional issues both in England and Europe. They will also become increasingly aware of the changing nature of law in society and should soon be taking part in topical discussions. Students on this course also tend to embrace the need to form balanced arguments and make reasoned judgements. The techniques of logical thinking and the skills necessary to analyse and solve problems should help with both communication and presentation skills.

### What students do with this qualification:

Some students use this qualification to study Law at degree level and have found it invaluable as it forms an excellent basis in terms of topics covered and skills developed. However, students need not fear that their motive for studying A level Law must lead them into the profession. Indeed, A level Law is an excellent foundation for a variety of courses and careers. Students may consider pursuing careers in business/finance, social sciences, politics, civil service, management or teaching to name but a few.

| | |
|---|---|
| **Subject:** Mathematics | **Awarding Body:** Edexcel |
| **Head of Dept:** Mr Parkinson | **Teachers:** Mr Parkinson, Mr Coles, Mrs Bate |

Preferred entry requirements: Grade 6 or above in GCSE Mathematics

## Specification Content

| Year 1 | Year 2 |
|---|---|
| • **Pure Mathematics**<br>Development of algebra alongside new work in trigonometry, vectors, exponentials and logarithms. Introduction of differential and integral calculus.<br>Topics covered include: Proof, Algebra and functions, Coordinate geometry in the $(x,y)$ plane, Sequences and series, Trigonometry, Exponentials and logarithms, Differentiation, Integration and Vectors.<br>• **Statistics**<br>Data analysis, representation of data, probability and hypothesis testing.<br>• **Mechanics**<br>Kinematics, forces and Newton's laws. | • **Pure Mathematics**<br>More advanced algebra and trigonometry, calculus, series and sequences.<br>Topics covered include: Proof, Algebra and functions, Coordinate geometry in the $(x,y)$ plane, Sequences and series, Trigonometry, Exponentials and logarithms, Differentiation, Integration, Vectors and Numerical methods.<br>• **Statistics**<br>Probability, regression and the Normal distribution.<br>• **Mechanics**<br>Moments and application of kinematics. |

## Structure of the course:

All students will be assessed on their knowledge of Pure Mathematics, Mechanics and Statistics at A level Mathematics. In Pure Mathematics you will build on topics that you have already met at GCSE level such as algebra, coordinate geometry and trigonometry. In addition to extending your knowledge in these areas, you will meet a new branch of Mathematics, calculus (differentiation and integration). The statistics content again builds on topics met at GCSE, including the summary and representation of data, probability and correlation, but also introduces statistical distributions such as the Binomial and Normal distributions, as well as hypothesis testing. Mechanics, which is closely related to Physics, focuses on kinematics, forces and Newton's Laws. Assessments will include a greater emphasis on modelling, problem-solving and reasoning. This builds on the increase in problem-solving questions in GCSE. Students will sit three examinations, two in pure mathematics and one in applied mathematics. All examinations will be taken at the end of the course.

## Methodology:

Within the classroom environment a variety of teaching methods are adopted including formal tuition and worked examples, class discussion, note taking, practice of examples, group work and the use of information technology e.g. graphical software. At all times you will have opportunities to receive further explanation and support within a small group. You will be expected to practise many examples, both within lessons and in your own study time, and to keep organised files of notes and examples. You will regularly need to spend time revising methods and concepts that you have been taught throughout the course.

## Strengths/Skills developed through studying this subject:

You will be encouraged to develop your understanding of Mathematics and mathematical processes in a way that will aim to promote confidence and foster enjoyment. You will develop the ability to reason logically and recognise incorrect reasoning, to generalise and to construct mathematical proofs. You will extend your range of mathematical skills and techniques and use them in more difficult problems, learning how to communicate effectively using Mathematics. You will begin to recognise how real-world problems can be represented by mathematical models.

## What students do with this qualification:

A qualification in Mathematics is essential if you wish to study Mathematics, Physics or Engineering at university. It may also be required for courses in Computer Studies, Architecture, Science, Business or Finance. Mathematics is also highly valued for entry into many other university courses, as well as for many varied careers, even those that do not directly involve Mathematics.

| | |
|---|---|
| **Subject:** Music | **Awarding Body:** Edexcel |
| **Head of Dept:** Miss Cassells | **Teacher:** Miss Cassells |

Preferred entry requirements:
Grade 5 or above in GCSE Music, minimum Grade 5 pass in one instrument, Grade 5 theory or Grade 5 Jazz instrumental examination.

## Specification Content

### A level

| Component | Requirements | Marks |
|---|---|---|
| **Paper 1**<br><br>**Performing** | Public performance of minimum 8 minutes duration.<br>The performance can be playing or singing solo, in an ensemble, improvising, or realising music using music technology.<br>This element is externally assessed. | 60 marks<br><br>30% of total A Level |
| **Paper 2**<br><br>**Composing** | Two compositions, one to a brief set by the examination board and one either free composition or also to a brief.<br>The total time across both submissions must be a minimum of 6 minutes.<br>This element is externally assessed. | 60 marks<br><br>30% of total A Level |
| **Paper 3**<br><br>**Appraising** | One written paper of 2 hours, comprising familiar and unfamiliar pieces. | 100 marks<br><br>40% of total A Level |

## Structure of the course:

For the Performing units, relatively little class time is needed. Our role is to ensure you understand the requirements and have selected pieces to perform of an appropriate standard and duration. Your role is to extend your practice routine by an extra hour per week so that you achieve the best possible marks. The Composing units involve the study of models, both to inspire the free composition and the techniques. A series of progressive technical exercises will develop your ability to harmonise a melody. The Listening units develop your understanding of how the Set Works "work". Study of each piece involves comparison of the melodies, rhythms, textures and structures in each work. The range of pieces is very wide and includes classical, jazz, pop, film and world music. Homework tasks will include research into composers and their backgrounds, but once you have learned the main skills of musical analysis, you will be expected to uncover the secrets of the music for yourself.

## Methodology:

The course has a healthy balance between practical and academic aspects, and one key feature is the importance of individual responsibility. This is especially true of the performing and composing work but also of the listening lessons. Groups are small, so there is no hiding place, but students seem to enjoy the content and appreciate the support they receive. Music is an inescapable part of human existence, and studying for the A Level is an opportunity to share in and appreciate something that people can't help doing. Students are encouraged to read widely around the historical and stylistic context of the set works, listen to a broad diet of music in their own time and attend as many 'live' concerts as possible (trips will be arranged as appropriate).

## Strengths/Skills developed through studying this subject:

Performing musicians develop skills of concentration, attention to detail, confidence in public performing, self-discipline, communication and determination. Students develop their ICT skills through use of the music software programmes available. Students refine their instrumental/vocal skill and develop lifetime talents.

## What students do with this qualification:

An A Level in Music opens many doors and closes none. There are two obvious, direct lines of progression into Higher Education – to a Music degree at a university or to a performing course at a Conservatoire. These courses are now much more varied than used to be the case and include the study of all types of musical tradition and the music business itself. **Pupils are awarded extra UCAS points for each examination grade passed (VI and above) from the Associated Board of the Royal School of Music, which enhances their capacity to gain the university place of their choice.** Careers as music teachers, whether in the classroom or the practice room, or as performers or composers are the natural next step. Beyond these, however, there are many careers available in arts administration and management, for students who perhaps don't aspire to be professional performers but who want to help orchestras or theatres to develop their audiences or reach out into their communities. Music therapy is another option for those with an interest in psychology and working with young (or elderly) people.

| | |
|---|---|
| **Subject:** Photography | **Awarding Body:** Edexcel |
| **Head of Dept:** Mrs Stott | **Teachers:** Mrs Stott |

Preferred entry requirements: Grade 6 or above in Art, Craft & Design, Fine Art or Photography at GCSE

## Specification Content

| **A level** | |
|---|---|
| **1** | **Personal Investigation and Personal Study**<br>Internally set and assessed. Externally moderated. (60% of the total qualification) |
| **2** | **Externally Set Assignment (ESA)**<br>Externally set, internally assessed and externally moderated. (40% of the total qualification) |

### Structure of the course:

Students have the opportunity to experiment with a range of photographic processes, digital editing techniques, materials and physical manipulation techniques to broaden their knowledge and make the transition from GCSE to A- Level in the first term of the course. They will then choose a topic for their major project (Component 1) with guidance from their teacher.

**Component 1** - **Personal Investigation (coursework) and Personal Study (written component):** This component allows students opportunities to generate and develop ideas, research primary and contextual sources, record practical and written observations, experiment with appropriate photographic processes and techniques, and refine ideas towards producing personal resolved outcome(s). It incorporates three major elements: practical work, supporting studies and a written study in a minimum of 1,000 words of continuous prose.

**Component 2 - Externally Set Assignment (ESA):** Students are asked to create supporting studies and personal outcome(s) in response to an externally set theme. The release date of the ESA is in February in year 2 and contains suggested starting points. Students have from then until the commencement of the final concluding 15-hour period of sustained focus to develop preparatory studies. The 15-hour period of sustained focus takes place under examination conditions.

### Methodology:

The visual arts provide a rich and varied opportunity for study at A Level and the course aims to reflect this by building on each individual student's areas of interest and strengths. Students are guided via individual tutorials and the coursework tasks facilitate a personal and professional response in a range of media. This course allows students to specialise in photography and digital-editing techniques whilst drawing on a broader range of art and design skills. The course allows for experimentation in a host of photographic-based disciplines with the flexibility to focus in a particular area of interest.

### Strengths/Skills developed through studying this subject:

Recording, research, presentation and communication skills are developed through the study of photography at A Level. Students learn to operate independently and creatively. They gain the attributes to allow them to express judgements about their own work and the work of others and apply this knowledge to move their work forward.

### What students do with this qualification:

Students completing an A Level in Photography will then have access to Art Foundation courses and degrees or careers in a wide range of Art and Design disciplines, including; Photography, Fine Art, Visual Communication, Graphic Design, Animation, Illustration, Interior Design, Fashion Design, Product Design, or teaching in schools or colleges. Students may also gain entry onto an equally wide range of vocational courses, which include industrial placement.

| | |
|---|---|
| **Subject:** Physical Education | **Awarding Body:** OCR |
| **Head of Dept:** Mr Linfield | **Teachers:** Mrs de Sousa-Bartlett, Miss Harvey, Mr Linfield |

Preferred entry requirements:
Grade 6 or above in GCSE Physical Education or
Grade 6 or above in GCSE Biology or Combined Science
To be participating and performing in their chosen NEA sport at club level or above

## Specification Content

| **A level** | |
|---|---|
| Year 1 | Year 2 |
| • Applied anatomy and physiology<br>• Exercise physiology<br>• Biomechanics<br>• Skill acquisition<br>• Sports psychology | • Sport and society<br>• Contemporary issues in physical activity and sport<br>• Evaluation and analysis of performance for improvement (EAPI) |

### Structure of the course:

How the course is assessed;

- Non-Exam Assessment (NEA). One practical performance, as either a coach or a performer, in an activity from the approved lists and one performance-analysis task – 30% of total A level
- A total of four hours of assessment split over three examination papers
  - (01) Physiological factors affecting performance, 2 hour written paper, 90 marks – 30%
  - (02) Psychological factors affecting performance, 1 hour written paper, 60 marks – 20%
  - (03) Socio-cultural issues in physical activity and sport, 1 hour written paper, 60 marks – 20%

  Written papers will include a wide range of question types including: single mark, short answer and extended response questions

### Methodology:

Many of the classroom lessons will be structured with teacher-led discussion and note-taking, but a variety of other teaching methods will be used to ensure that students are actively involved in learning throughout the course and can work independently when required. A range of practical work will be carried out throughout the course to allow development of practical and investigative skills.

Learners are assessed in performing or coaching **one** activity; this activity **must be** taken from the OCR approved list. Students are **expected** to be performing or coaching this activity outside school at club level or above. They must be able to refine their ability to perform effectively and should also be developing individual skills and techniques under the guidance of a qualified coach/ instructor. They should also have the opportunity to compete externally demonstrating appropriate tactics and strategies.

### Strengths/Skills developed through studying this subject:

This is an interesting and challenging learning experience, linking key sporting ideas with practical performance and gaining an insight into the relationships they have with each other.
The development of transferable skills including: decision making, psychological understanding of people, independent thinking, problem-solving and analytical skills as well as thinking and acting under pressure.

### What students do with this qualification:

A level Physical Education is an excellent base for a university degree in sports science, sports management, healthcare, or exercise and health. Physical Education can also complement further study in biology, human biology, nutrition and sociology.
A level Physical Education can open up a range of career opportunities including sports coaching, physiotherapy, personal training or PE teaching. The transferable skills learnt through the study of this course, such as decision making and independent thinking are also useful in choosing the most suitable career path.

| | |
|---|---|
| **Subject:** Physics | **Awarding Body:** AQA |
| **Head of Dept:** Mrs Dudley | **Teacher:** Mr Sandford |

Preferred entry requirements:
Grade 6 or above in GCSE Physics or Combined Science

## Specification Content

| **A level** | Year 1 | | Year 2 |
|---|---|---|---|
| **1** | Measurements and their errors | **6** | Further mechanics and thermal physics |
| **2** | Particles and radiation | **7** | Fields and their consequences |
| **3** | Waves | **8** | Nuclear physics |
| **4** | Mechanics and materials | **9** | Optional section (see below) |
| **5** | Electricity | | |

### Structure of the course:

The A level qualification will involve the study of eight sections as outlined above and an optional section (with a choice from: astrophysics, medical physics, turning points in physics, engineering physics, applied physics and electronics). Sections 1-5 will be assessed during a two-hour written paper, which will include short and long answer and multiple choice questions. Sections 6-8 will also be assessed in a two-hour written paper with short and long answer and multiple choice questions. The third paper will assess practical skills and data analysis with short and long answer questions followed by short and long answer questions on the optional section. In Year 1 the course builds upon the skills and knowledge acquired at GCSE as well as introducing new topics, such as particle physics. Teacher assessed practical skills and 12 required practical activities are incorporated into the two year course and lead to a practical endorsement.

### Methodology:

Teaching is well structured to allow students to further develop ideas met at GCSE Physics. Students will be expected to work collaboratively and independently by tackling questions and carrying out practical tasks. The nature of the course requires some independent research with much independent study and learning. There are more calculations at this level than previously at GCSE, and these need to be practised regularly if they are to be mastered. None of the numerical skills at A Level require any methodology beyond GCSE Higher Tier Mathematics.

### Strengths/Skills developed through studying this subject:

The course involves knowledge, understanding, application and evaluation. These are skills that will be developed through the units and through experimental and investigative work. The ability to communicate in a clear, accurate, logical and coherent manner and to use appropriate vocabulary will also be developed. Numeracy skills will also be further developed in a contextual manner.

### What students do with this qualification:

Employers recognise physicists as people of intelligence and ability. Increasingly, companies are looking for physicists for entry into a wide range of disciplines. Physics is required for entry into all engineering based courses and often medicine, dentistry and physiotherapy. Pure physics leads invariably to research where new theories and new products are developed and is a fascinating and rewarding career. Applied physics can also lead to a vast spectrum of interesting fields: environment, space, transport, computing, medicine, economics and finance. Moreover, many A level students have found that Physics increases their university options beyond the obvious scientific choices. UK Physics graduates are in demand worldwide, and especially in the USA.