GCSE Studies
Making Choices for
September 2020
Contents

THE ACADEMIC PROGRAMME IN THE FIFTH AND UPPER FIFTH ........................................... 1
ART & DESIGN (FINE ART)........................................................................................................ 7
CLASSICAL CIVILISATION...................................................................................................... 8
COMPUTER SCIENCE............................................................................................................. 9
DESIGN AND TECHNOLOGY................................................................................................. 10
DRAMA.................................................................................................................................... 11
ENGLISH LANGUAGE............................................................................................................... 12
ENGLISH LITERATURE............................................................................................................ 13
GEOGRAPHY................................................................................................................................ 14
GREEK...................................................................................................................................... 16
HISTORY..................................................................................................................................... 17
LATIN........................................................................................................................................ 18
MATHEMATICS....................................................................................................................... 19
MODERN FOREIGN LANGUAGES............................................................................................ 20
FRENCH..................................................................................................................................... 20
MANDARIN CHINESE.............................................................................................................. 21
MANDARIN CHINESE Early Entry for Pre-U (A-Level Equivalent)......................................... 22
SPANISH................................................................................................................................... 23
MUSIC....................................................................................................................................... 24
PHYSICAL EDUCATION............................................................................................................ 25
RELIGIOUS STUDIES (Philosophy & Religion)..................................................................... 27
SCIENCE.................................................................................................................................. 29
BIOLOGY..................................................................................................................................... 30
CHEMISTRY.............................................................................................................................. 31
PHYSICS.................................................................................................................................... 32
DOUBLE SCIENCE.................................................................................................................. 33
HIGHER PROJECT LEVEL 2 QUALIFICATION (HPQ)................................................................. 35
THE ACADEMIC PROGRAMME IN THE FIFTH AND UPPER FIFTH

Moving into the Fifth Form is an exciting time for students: they are able to specialise in their studies for the first time. The girls will study a broad range of compulsory subjects which will give them a strong base of general knowledge and skills, afford access to Higher Education or employment, and provide them with essential skills for life. In addition, they will have the pleasure of studying three or four subjects they have specifically chosen because they enjoy them. Nationally, the V and UV year is called “Key Stage Four” and is the end of this part of their education. Benenden girls can expect to gain, on average, ten GCSEs and a huge range of extra experiences and aptitudes.

In common with almost every other school in England, the compulsory subjects at Benenden are:

- English
- English Literature
- Mathematics
- Sciences (Biology, Chemistry and Physics)
  - At Benenden we encourage girls to begin all three sciences and most will take all three through to the full IGCSE. For some girls the Double Science Award will be a more appropriate route and they will be advised accordingly later in their course.
- Modern Foreign Language (French or Mandarin or Spanish)
  - Whatever language is chosen, the student must have studied it before for at least one year and be of a standard to gain GCSE at the end of UV. Students who have studied a language as an Extra such as German, Arabic or Russian may choose this language as their compulsory one if they are of a standard to achieve GCSE at the end of the UV but will need to continue paying for the specialist tuition.

Students choose further GCSE subjects which interest them and in which we hope they will do well. A free choice of three or four from the following list is available:

- French
- Mandarin
- Spanish
- Latin
- Greek
- Classical Civilisation
- Religious Studies
- History
- Geography
- Art and Design
- Design and Technology
- Computing
- Music
- Drama
- Physical Education

In addition, the Higher Project Level 2 is available as an extra, non-timetabled, GCSE on top of the choice of three or four options.

It is very clear that universities and employers want candidates who can demonstrate quality not quantity of qualifications. We try to balance this principle with the importance of breadth and the ability to study subjects which are dear to the girls’ hearts. Thus, not every student will pursue the same number of GCSEs: the majority do ten or eleven, but some will do eight and some up to thirteen, depending on individual circumstances.

It is important that girls recognise that their GCSE studies are just part of the education they receive at Benenden while they are in the V and UV years. We are proud to say that we do not mistake a syllabus for an education. In addition to their subjects, all students participate in sport, co-curricular activities and the Personal and Professional Development Programme. Within these, we offer:
• Personal, Social, Health and Economic Education.
• Global Awareness - a programme of current affairs and global awareness which covers current affairs, the political and electoral systems in the UK, international relations and environmental issues.
• Careers and Enterprise activities.
• Outdoor Education through the Duke of Edinburgh Award, CCF or other adventurous activities.
• The chance to take the Level 2 Higher Project (which is another full GCSE qualification and is done in the girls' own time, not taking up an option box).
• Academic enrichment and stretch activities.
• Co-curricular and academic enrichment activities, e.g. law, philosophy and ethics, textiles, engineering, environmental studies, medical society, creative writing – these may change yearly depending on student and staff interests.

The girls will also have private study periods within their weekly schedules, which gives them the opportunity to complete prep, read widely, consolidate their learning and revise. Classrooms and the library are always available during the day for students who have study periods to work on the campus. All this does mean that the students are very busy and effective organisation is central to success. Tutors help by monitoring the workloads of their tutees and giving advice on revision and study techniques.

Sport
From Fifth Form upwards, although participation is still compulsory, each student has the chance to choose some of her sports activities (although those in squads will be required to attend training in these timeslots). Options are extremely varied, mainly fitness-based and include spin, Pilates, Zumba, aerobics, yoga, fitness and training, trampolining, functional training and core, fit mix, dance club and basketball.

Beyond the compulsory programme of Physical Education, there are many other opportunities for sports: in clubs, school teams or as individuals, in the evenings and at weekends. Fitness gym, swimming and charity challenges add to the excitement. Students may continue to train with county teams and clubs.
### Programme of Studies

The table below illustrates the number of hours allocated to each subject for each GCSE year group each week:

<table>
<thead>
<tr>
<th>Year Group</th>
<th>Fifth Form (V; Year 10)</th>
<th>Upper Fifth Form (UV; Year 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compulsory Subjects:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language and Literature</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Physics</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Language 1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>PPD Programme</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Sport</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Optional Subjects:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(choose 3 or 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandarin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greek</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classical Civilisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>6 or 8</td>
<td>6 or 8</td>
</tr>
<tr>
<td>Geography</td>
<td>for three or four GCSE choices</td>
<td>for three or four GCSE choices</td>
</tr>
<tr>
<td>Art</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extended Project (not in option box structure and can be chosen in addition to four others)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>
Schedule for Making Choices

- **December 2019**: Autumn Term reports issued.
- **Saturday 18 January 2020**: At the Lower Fifth Parents’ Meeting there will be an introductory talk about making choices and the opportunity to speak with subject teachers.
- **Monday 24 February 2020**: This is the deadline for choices of GCSE subjects.

There will still be opportunities for girls to change their minds about which optional subjects they wish to pursue but after the deadline for choices this would need to be within the option box structure and would depend on group size.

**Please note – option subjects will only run if there is sufficient take-up.**

**GCSE Subjects: Making Informed Choices**

The descriptions of each of the courses are here to help you work out the best options for each individual; the Careers staff, Heads of LV and V, Hms, Tutors, teachers and Heads of Departments will give further advice. Here, however, are a few general points for Lower Fifth students to bear in mind: -

- All students must take English, English Literature, Mathematics, the sciences and at least one modern foreign language (chosen from French, Mandarin and Spanish): **this gives seven compulsory GCSEs.**

- Try to make sure that you are keeping as many doors open as possible: check that your choice will not prevent you from going on to a career which you might be interested in later.

- Do not be influenced by what your friends tell you: you know yourself better than they know you, and their experience may be very different from yours. Choosing by teacher is definitely not a good idea either, because they may change - and so will your attitudes and feelings!

**Three or Four Options?**

The usual total of GCSE courses is **10 or 11**. For entry into higher education and employment, the grades you acquire and the high standards you achieve in other areas will be very important (more important than the number of certificates); so think carefully about how much to commit yourself to, taking into account such things as music practice and playing team sports. In some cases, we might advise a student to take nine GCSEs – ie choose two options and a language rather than three or four. We do encourage every student to include a humanities subject within their choices, and also an artistic or practical subject wherever possible and every student should ensure their overall programme – which includes co-curricular activities – ensures she maintains practical and creative skills.

The number of core compulsory subjects takes up 16 periods, and thus girls need to consider the time they want to give to their co-curricular programme and make the number of option choices accordingly. On the other hand, girls often gain their best grades from their options. We do all we can to encourage girls to continue with subjects they love and which we feel they will do well at. Quality is more important than quantity, but it is also important that girls feel they can have a good degree of personal choice.

We can support this in a number of ways: -

- Advising each girl personally as to which/the number of subjects will be best for her, taking into account her previous academic performance, all-round academic ability, her interests, her work ethic and her other commitments as well as any career choice. The Academic Deputy’s team, the Careers Department and the girls’ Hms and Tutors are all involved in this process, as well as the subject staff.

- All girls will have six hours a week of science. Most girls will wish, and be able to, take all three sciences through to the exam, gaining IGCSEs in Physics, Chemistry and Biology. However, some will be advised that the Double Science award would be better for them and
will continue with six hours of science but will take two IGCSEs and not three.

- **Even the most competitive universities do not expect, or require, more than ten GCSEs.** The most selective universities are increasingly putting emphasis on candidates having high GCSE grades. It is not quantity that impresses them most, rather consistent high achievement in a range of disciplines. Eleven should be taken only where a girl feels she can do just as well as she would with ten and loves all her options and cannot imagine giving them up or wishes to keep her options open for a while longer before specialising at A Level. However, there is no evidence that girls who do 11 do less well than those doing ten – quite the contrary in fact.

Courses will have to be arranged in blocks, because the timetable will work only if subjects are grouped together. **It may be that a student’s ideal combination of subjects may prove impossible,** though we expect to be able to manage most of the girls’ choices.

Some courses have a maximum, others a minimum class size and you should understand that we may have to say, in exceptional circumstances, that some courses will not happen, or some choices will not be possible; we would discuss this with you. We would not generally run a course if fewer than six girls have opted for it.

In summary, you should choose a subject because you enjoy it, are good at it, or it will be useful for a future career path.

**Exam Changes**

There have been some recent changes to the format of GCSEs and apart from the practical subjects such as Drama or DT, most subjects now have no coursework or controlled assessment, and are assessed entirely by exam at the end of the two-year course. The students also have formal school exams in May/June of V and mocks in January of UV.

The grading system has changed from A*-G to 9-1: the bottom of Grade 4 will be pegged to what was the bottom of a C Grade. However, universities and employers will only regard a Level 5 as a “good pass”. The table shows how the two systems match up:

<table>
<thead>
<tr>
<th>A*</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thus, the top of a Level 9 is above what used to be the top of an A* and thus we can expect to see far fewer 9s than we saw A*s. The rigour desired by the government when the new GCSEs were designed is likely to take effect over several years, and thus we may well see a slight decrease in Level 9s and 8s each year as grade boundaries are adjusted gradually. These changes mean GCSEs will be more challenging than they were and it will be important for parents to bear that in mind, especially if they have older children who did GCSEs under the old system. It is also worth noting that a 7 is an A in old money!

**IGCSEs versus GCSEs: what’s the difference?**

Along with the majority of independent schools, we offer a combination of normal GCSEs and IGCSEs. The ‘I’ stands for International. IGCSEs are simply a different format of exam, but with almost identical content to the main GCSEs. There are four main exam boards for conventional GCSEs – Edexcel, AQA, OCR and Eduqas. Cambridge and Edexcel also offer IGCSEs. An organisation called Ofqual carefully regulates the levels of difficulty of all public exams and ensures
parity. However, the Government is no longer allowing IGCSEs to be counted in national league tables as they are keen for state/maintained schools to choose the reformed GCSEs and thus state schools cannot teach IGCSEs, even if they wished to, as they have to report to league tables in order to access their funding. Independent schools such as Benenden are still free to choose whatever syllabus and exam board we believe offers the most engaging experience to our students. A grid showing which exam board matches to each subject is at the back of this booklet.

This does mean that some national league tables will not include these exams and thus will not properly represent Benenden’s achievement at GCSE. We will ensure that our website and any league tables of independent schools do properly reflect our results. **We remain absolutely committed to having the freedom of choice to select the best, most interesting syllabus for the girls to study regardless of specious league table rules.** Our exam results at GCSE have been consistently strong and we have been singled out by the Independent Schools Council as having exceptional “value added” – that means each girl will have achieved more highly than statistical projections indicate would have been the case. However, effective study habits, engagement, taking responsibility and sheer hard work are the overriding factors in a girl’s success and we spend a lot of time encouraging the girls to apply these qualities to their work. Equally important is the development of character and skills such as resilience, resourcefulness, reflectiveness, enterprise and collaboration which we encourage through the boarding ethos of the School. We aim that between the start of LV and the end of UV, every girl experiences a stimulating range of learning experiences, some accredited and some not, that sets her up well for life and develops a wide range of talents and interests and helps her understand the world with a lively and enquiring mind – the actual gaining of GCSE certificates should be a side effect of this and not the tail that wags the dog.

**Next steps**

Subsequent to the LV parents’ morning in January, this booklet will be disseminated and available to parents on the Portal. The girls should consider their options and seek guidance from their tutors and subject teachers before confirming their choices to us. If you wish to discuss your daughter’s GCSE choices, please do contact your daughter’s Tutor, Head of Year, Hm, or myself.

Best wishes

Ali Harber
Deputy Head Academic
January 2020
ART & DESIGN (FINE ART)
Exam board: AQA 8202

Specification

Course content
There are four distinct elements to studying Art and Design: practical application of skills, drawing, the development and refinement of ideas, and writing critical and analytical reflections. The course is broken into coursework and an externally set assignment and is suitable for students who enjoy innovation and creative thinking as well as having a facility for, and enjoyment of, their practical art. Students can work in any appropriate media according to their interpretation and interest, and will spend time in those studios best suited to the work in hand; movement between all studio spaces remains flexible throughout the two-year course. All students are entered for GCSE Art and Design Fine Art as this allows for work in any medium (specialising in one or trying a combination), including photography, textiles, sculpture, printmaking, illustration, digital art, painting and, of course, drawing. However, the work must be Fine Art in approach and intention; this would preclude such craft and design elements as making a fashion garment, packaging and ceramic vessels. Team teaching is utilised within the department at this level, in order to ensure that specialists in a wide variety of disciplines are available to students.

Research, preparatory work and the use of the sketchbook are an important feature of all Art and Design specialisms and should be carried out before a major piece of work is completed. This could involve taking photographs, using ICT, making careful sketches, making textile samples and models, visiting galleries and studying historical and contemporary artists or visiting places of interest relevant to a current project. Drawing in its many forms is a compulsory element of the course as is critical and analytical writing based upon the study of the work of your own work and other artists/designers/crafts-persons. This can take the form of extended writing and/or annotation within the sketchbook.

Why study Art? Do you have a desire to experiment and ponder the question ‘what would happen if…?’ Are you the sort of person who enjoys a high level of independent research, freedom for individual interpretation and likes getting your teeth into a long project? This resilience in refining ideas should also be a personal mantra to moving your work forward creatively and be the key to enjoying experimental work. Transferable skills include problem solving, illustrating ideas visually, critical and creative thinking, written and visual reflection, and presentation. It will equip you to study A Level Art, which is a qualification acknowledged by all universities.

Enrichment opportunities The Art Department arranges gallery visits, lectures as well as encouraging students to respond to the surrounding environment to strengthen the creative thought process, underpin work with first hand research and enhance the way students approach other subjects as independent thinkers.

Related careers These can include: advertising, publishing, architecture, interior design, fashion design, graphic design and media, theatre or gallery work, film and photography as well as Fine Art.

GCSE: 2 year
Component 1: 60% Portfolio
This unit is an extended collection of works based on a personal investigation of an idea, concept, theme or issue. It should demonstrate an ability to research, record and develop creative ideas, explore and select appropriate media and evaluate ideas in a variety of ways to produce resolved, coherent and personal responses. At least one complete body of work meeting all of the assessment criteria is required. In addition any unrelated work may also be submitted.

Component 2: 40% Externally-Set Assignment
This task is undertaken at the end of the course, which covers the three months of the Spring Term. The question paper is provided electronically on 2 January and provides students with a starting point from which to create a new body of ideas. Students are then required to work towards the production of a piece under supervised conditions at the end of the course. The time allowance for this is 10 hours and is undertaken over two days with the aid of the preliminary studies produced since January.
CLASSICAL CIVILISATION

Exam board: OCR

Specification

Course content

Classical Civilisation looks at the ancient worlds of Greece and Rome, including their culture, society and literature. This course involves the study of 2 units, each worth 50% of the total GCSE.

Unit 1: Myth and Religion

Coverage: Greek and Roman gods, heroes and myths; religious festivals and activities; links between myths and power; practices and beliefs surrounding death and burial.

Unit 2: The Homeric World

Coverage: Homer The Odyssey, books 9, 10, 19, 21, 22 (in translation); background to Homeric world (eg Mycenaean palaces).

It is not necessary for pupils to have studied Classical Studies in Year 9, since the GCSE course presumes no previous knowledge, nor are pupils required to know any Latin or Greek as the whole syllabus is studied in English (including the literature topic).

How it is assessed

GCSE Classical Civilisation is assessed entirely by examination at the end of the course. The examination will consist of two 90-minute exams, each worth 50% of the final grade. Since September 2017 Classical Civilisation has been assessed on the new tariff, grading from 9-1.

Benefits of studying Classical Civilisation

Much of European culture derives from the Greeks and Romans, and this course will not only provide insights into these two great civilisations but will also help pupils to better understand the basis from which our literature, thinking and way of life have developed. This subject appeals to those who would like to combine cultural and historical analysis with the ever-fascinating myths and legends of the classical world. Pupils are encouraged to investigate comparisons between ancient and modern life and often find that our classical past gives us a real insight into our complex present. Analysing civilisations that seem quite different to our own also helps us to appreciate and read human behaviour and develops highly profitable skills that enable us to interpret cultural differences.

COMPUTER SCIENCE  
Exam board: CIE IGCSE  
Specification

Course content
The syllabus develops students’ understanding of the main principles of problem solving. They can apply their understanding to develop computer-based solutions to problems using algorithms and a high-level programming language. Learners also develop a range of technical skills, as well as being able to effectively test and evaluate computing solutions. The course will help learners appreciate current and emerging computing technologies, benefits of their use and recognise their potential risks.

The course is split into two sections; Theory of Computer Science and Practical Problem-Solving and Programming. In Section 1 students will cover data, communications, hardware, software, security and ethics. In Section 2 students will have the opportunity to work through algorithm design, problem-solving, programming and databases.

How it is assessed
The course is assessed through two written papers, both of which are externally assessed at the end of UV.

<table>
<thead>
<tr>
<th>Paper 1 – Theory</th>
<th>1hr 45m</th>
<th>60% of the final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-answer and structured questions, worth 75 marks.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paper 2 – Problem-solving and programming</th>
<th>1hr 45m</th>
<th>40% of the final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>This paper uses pre-released material that students will review in lessons before the exam. The paper is worth 50 marks in total, 20 of which are based on the pre-released material.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Benefits of studying Computing
This course enables students to develop an interest in computing and to gain confidence in computational thinking and programming. They develop their understanding of the main principles of problem-solving using computers.

Computing is an enabling subject affording a multitude of opportunities. The number of IT professionals needed in this country is growing, but fewer and fewer people are qualifying in this field. The logical thinking, problem-solving and communication skills developed through this subject are highly valued in a range of careers such as law, finance and business.

Enrichment opportunities
There are a number of programming-based national and international competitions as well as the opportunity to design your own Apps, games etc.
## DESIGN AND TECHNOLOGY

**Exam Board:** AQA Product Design

### Specification

#### Unit 1: Materials, Components and Processes

This unit (50% of the GCSE) is assessed through a written examination paper covering the following topics:

- physical and mechanical properties of a broad range of materials and components
- environmental sustainability of products, economic manufacture, quality assurance, control and indicators
- methods by which materials and components can be manipulated during manufacturing
- knowledge and working properties of a range of woods, metals, polymers and papers
- health and safety plus risk assessment issues relevant to working with materials and machinery
- computer aided design (CAD) and computer aided manufacture (CAM)
- ergonomics, anthropometrics, iterative design, consumer safety, technology push and market pull
- life cycle of products, user functionality, recycling, disposal regimes, logos, consumer and copyright law
- practical mathematics for engineered solutions within a range of products
- applied physical science for the development of product robustness and effectiveness

**Value within GCSE = 50%**

#### Unit 2: Coursework - NEA - Individual investigation

This unit (50% of the GCSE) consists of one individual investigation and full 3-D product outcome with folio. This includes a detailed design development and realisation folio, which allows individuality in design expression throughout. Students produce a fully reasoned design folio, and a finished 3-D product which has been carefully manufactured, tested and evaluated, supported by a plan of action for potential industrial manufacture. Students are encouraged to work in an experimental manner and opportunities to explore new approaches, materials and processes are fully supported in the Technology Centre, and via extended opportunities for work beyond lesson times with staff. The work of historical and contemporary designers in society are explored and discussed to contextualise the study from the start. The latest rapid prototyping and manufacturing techniques are explored and used in the Workshop, alongside ample opportunities to use a range of industry based machinery and equipment to give a broad introduction to manufacturing systems.

**Value within GCSE = 50%**

### Why study this GCSE?

The course will suit those who enjoy exploring and manufacturing new 3-D ideas, solving problems, thinking ‘outside the box’, developing higher order thinking skills and being innovative with materials and some materials science. At this level there is an increased autonomy for students to develop their own design thinking and to support this there are the technologies of Laser cutting and 3-D printing machines to hand, whilst the Design Studio and Critique Room offer many and varied an opportunity to develop a real understanding of the design rationale and place in society for the wealth of new products becoming available to consumers. The element of manufacturing products is key in the course and this is represented through the 50% coursework loading. Transferable thinking and applied learning skills are increasingly a feature sought in securing a place on a range of courses later in life. This Product Design course provides many such soft and hard skills. Good combinations with D&T: Product Design include the Sciences, Mathematics, Computing, Art or Business for continued study at Advanced Level. Many students will follow this course because of the clear progression route it presents alongside the broad range of transferable problem-solving skills. Equally this course offers plenty of opportunities to explore 3-dimensional designing, modelling, manufacturing and testing through a student derived product and lots of hands-on experimental and practical work.

### Progression to advanced level study, higher education and university courses

Our Product Design students go on to study a range of advanced level subjects, many with a view to following specific degree courses in Product Design, Engineering or Architecture. Our course will also appeal to those who have an interest in any of the following careers: product design, civil, structural or mechanical engineering, motor sport engineering, automotive (car) design, manufacturing technology, engineering design, materials science, interior architecture, interior design, packaging design and marketing, exhibition and display design, landscape architecture, theatre set design, furniture design, CGI gaming design, sports product design, medical product and prosthesis design or industrial design. Many major universities include Design and Technology at A2 as the preferred third A Level for entry to a range of Engineering and Architecture degrees and it is the expected choice for Product Design degrees.
The subject content for GCSE Drama is divided into three components:

1. Understanding Drama
2. Devising Drama
3. Texts in practice

**Component 1: Understanding Drama (written exam) - 40% of GCSE**

**What is assessed**
- Knowledge and understanding of drama and theatre
- Study of one set play from a choice of six
- Analysis and evaluation of the work of live theatre makers

**How it is assessed**
- Written exam: 1 hour and 45 minutes
- Open book / 80 marks

**Questions**
- Section A: multiple choice (4 marks)
- Section B: four questions on a given extract from the set play chosen (44 marks)
- Section C: one question (from a choice) on the work of theatre makers in a single live theatre production (32 marks)

**Component 2: Devising Drama (Practical) - 40% of GCSE**

**What is assessed**
- Process of creating devised drama
- Performance of devised drama (students contribute as a performer)
- Analysis and evaluation of own work

**How it is assessed**
- Devising log (60 marks)
- Devised performance (20 marks)
- 80 marks in total

This component is marked by teachers and moderated by AQA.

**Component 3: Texts in practice (Practical exam) - 20% of GCSE**

**What is assessed**
- Performance of two extracts from one play (students may contribute as performer or designer). Free choice of play but it must contrast with the set play chosen for Component 1

**How it is assessed**
- Performance of Extract 1 (20 marks) and Extract 2 (20 marks)
- 40 marks in total

This component is marked by AQA.

**Benefits of studying Drama**
- Encourages effective teamwork. Teaches discipline, time-management and co-operation
- Develops interpersonal skills: communication, listening, empathy and physicality. Promotes self-confidence - teaches you how to speak and present confidently
- Encourages experimentation and risk-taking. Increases ability to think creatively, imaginatively and divergently
- Allows you to consider the social, economic, political and historical conditions in other times and cultures and encourages you to view things from multiple perspectives
- Develops your research skills

**Enrichment opportunities**
- Workshops
- Theatre Trips
- Productions
ENGLISH LANGUAGE
Exam board: Edexcel IGCSE

Specification

Course content

<table>
<thead>
<tr>
<th>Unit</th>
<th>Content</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| Paper 1: Non-fiction and Transactional Writing | • Reading (45 marks) – a mixture of short and long questions on non-fiction extracts. One extract previously studied from Part 1 of the new anthology; one extract unseen.  
• Writing (45 marks) – one transactional writing task (from a choice of two) with a set audience, form, purpose.  
The anthology text will be reprinted in the exam paper. | 60%  
One exam (2 hrs and 15 minutes) |
| Paper 2: Poetry and Prose Texts and Transactional Writing | • Assignment A: One 30 mark essay on a poem or prose text from Part 2 of the new Anthology.  
• Assignment B: One 30 mark imaginative writing task from a choice of three.  
The anthology text will be reprinted in the exam paper. | 40%  
One exam (1 hr and 30 minutes) |

How it is assessed
Assessment is entirely through terminal examination at the end of the course in the Upper Fifth. You will be prepared in detail for each of these examinations throughout the course.

Benefits of studying English Language
English Language is taught alongside English Literature as a core part of your curriculum. Your course will make you a better communicator and more able writer as well as a reader able to analyse and appreciate the subtleties of meaning and language in a wide variety of fiction and non-fiction texts.

Enrichment opportunities
Various opportunities to extend wider reading and study within English are offered both by the English Department and by the Library. Word Factory is also available for those with a particular interest in the creative writing element of English.
ENGLISH LITERATURE
Exam board: Edexcel IGCSE
Specification

Course content

<table>
<thead>
<tr>
<th>Unit</th>
<th>Content</th>
<th>Texts studied</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 2: Modern Drama and Literary Heritage Texts</td>
<td>Modern drama text (one question from a choice of two in the examination). Literary heritage texts (one essay from a choice of two).</td>
<td>An Inspector Calls Macbeth</td>
<td>40% One exam (1 hr 30 minutes)</td>
</tr>
</tbody>
</table>

How it is assessed
Assessment is entirely through terminal examination at the end of the course in the Upper Fifth. You will be prepared in detail for each of these examinations throughout the course.

Benefits of studying English Literature
English Literature is taught alongside English Language as a core part of your curriculum. Your course will make you a better communicator and more able writer as well as a reader able to analyse and appreciate the subtleties of meaning and language in a wide variety of fiction and non-fiction texts.

Enrichment opportunities
Various opportunities to extend wider reading and study within English are offered both by the English Department and by the Library. Word Factory is also available for those with a particular interest in the creative writing element of English.
GEOGRAPHY
Exam board: Edexcel IGCSE
Specification

Course content

Paper 1: Physical geography

- Externally assessed
- Availability: June
- First assessment: June 2020
- 70 marks

Content summary
- River environments
- Coastal environments
- Hazardous environments
  including fieldwork from one of these topics

Assessment
Examination of 1 hour and 10 minutes, consisting of two sections. The questions are a mixture of multiple-choice, short-answer, data-response and open-ended questions.

Section A
Candidates choose two out of three questions on: river environments, coastal environments, hazardous environments.

Section B
Candidates choose one out of three fieldwork-related questions on: river environments, coastal environments, hazardous environments.

Paper 2: Human geography

- Externally assessed
- Availability: June
- First assessment: June 2020
- 105 marks

Content summary
- Economic activity and energy
- Rural environments
- Urban environments
  including fieldwork from one of these topics
- Global issues (Fragile environments and climate change, Globalisation and migration, Development and human welfare).

Assessment
Examination of 1 hour and 45 minutes, consisting of three sections. The questions are a mixture of multiple-choice, short-answer, data-response and open-ended questions.

Section A
Candidates choose two out of three questions on: economic activity and energy, rural environments or urban environments.

Section B
Candidates choose one out of three fieldwork-related questions on: economic activity and energy, rural environments or urban environments.

Section C
Candidates choose one out of three questions on: fragile environments and climate change, globalisation and migration or development and human welfare.
Geographical Fieldwork
As part of the course you are required to complete one full day of physical fieldwork and one full day of human fieldwork. For the physical, we will be visiting a river environment along the River Medway in Kent. For the Human, we will be visiting the site of the Olympic Park in East London, where there has been extensive redevelopment. There is no coursework, but there are exam questions on your fieldwork experience.

Why study Geography?
- You enjoy learning about people and their world: Societies, economies, cultures and the environment.
- You are keen to learn and develop a wide range of skills. Geography bridges the gap between science and the social sciences.
- You are seeking a broad-based academic subject, offering above average graduate employability if you were to continue it beyond school.
- You want to have what the Government and Russell Group universities call an ‘enabling subject’, valued by universities and employers.

Careers and progression with Geography
Studying Geography opens up a wide range of careers. Read on to find out more about the types of jobs and career paths that geographers can enjoy.

Geography jobs can be found in these sectors:-
- Law and Finance
- Environment & Sustainability
- Physical Systems
- Society
- The Business World
- Geographical Techniques
- Development & Global Issues
- Settlement
- Travel, Tourism, Leisure and Culture

Geography can provide you with many transferable skills, you will become:-
- A good communicator with strong presentation skills
- Competent with ICT
- Able to carry out research
- Used to working effectively in a team and taking a variety of roles in a team
- Able to manage your time by juggling commitments, meeting deadlines and managing stress
- Good at combining information from a variety of sources with excellent writing skills

Above all else, Geography is relevant to the world in which we live. We live in ‘exponential times’. The world is changing more quickly and more significantly than ever before. If you want to understand these trends and how we can try to manage them…. study Geography!
**GREEK**

**Exam board:** OCR  
**Specification**

**Course content**

Students continue their study of the Greek language, learning and becoming familiar with increasingly complex sentence structure and beginning to tackle more regularly extended passages of Greek that encourage them to apply all their previous knowledge and expertise, rather than focus on one particular area at a time. Later on, during the Fifth Form students will begin reading their set texts. This involves reading selected and un-adapted passages by Greek authors as a preparation for discussion and exploration as works of literature. Students therefore develop their abilities to respond critically and sensitively to material and may explore such areas as how an author seeks to persuade or entertain an audience, the morals and values of a society other than their own, or even cultural bias.

**How it is assessed**

GCSE Greek is assessed entirely by examination at the end of the course. There are then three papers, one for language that contributes 50% of the total mark, and one for each set text, each contributing 25% of the total. The language paper has one story taken from a social or mythological setting which tests core skills with comprehension and a small amount of translation, then a second story taken from history that tests knowledge in more detail, with more advanced translation. This type of assessment follows on naturally from what girls are already doing in the Lower Fifth. The prose and verse set text papers each have the same format and require students to answer questions about the texts they have already seen and studied; these questions range from straightforward factual comprehension to literary analysis. Since September 2016 Greek has been assessed on the new tariff, grading from 9-1.

**Benefits of studying Greek**

Greek at GCSE offers students a unique and highly respected form of intellectual challenge and stimulation, with a wide portfolio of critical, analytical and communicative skills, as well as being a richly rewarding area of study in and of itself. They will develop a blend of skills that, as well as being of great benefit in their own right, enhance and complement skills used and developed in many other subject areas. It is, along with Latin, the only GCSE to give pupils the opportunity to read literature in a language other than English. The nature of the language and the study of this literature helps students to develop a disciplined approach to the handling of unfamiliar information, and then to communicate what they have worked out in a clear and accurate way. As well as enhancing pure linguistic skills, Greek GCSE offers an opportunity for students to develop their powers of analysis and interpretation, as well as learning to communicate knowledge and thoughts effectively and convincingly. It is hard to think of any professional career in which these attributes are not of benefit. And with a typical A* rate (under the old tariff) of over 80%, and 100% A*/A, the intellectual challenge and development the subject offers students does not come at a cost in grades.
HISTORY
Exam board: Edexcel IGCSE (4HI1)

Specification

Course content
The theme of IGCSE History is Modern International History.

<table>
<thead>
<tr>
<th>Term</th>
<th>Unit</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 2020</td>
<td>Origins and Course of the First World War, 1905-1918</td>
<td>· The alliance system and international rivalry, 1905-14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The struggle for control in the Balkans, 1905-14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The growth of tension in Europe, 1905-14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The Schlieffen Plan, the Western Front, the Somme</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The War at Sea and Gallipoli</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The defeat of Germany</td>
</tr>
<tr>
<td>Spring and Summer 2021</td>
<td>Development of Dictatorship: Germany, 1918-1945</td>
<td>· The Weimar Republic and its early problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The recovery of Germany, 1924-29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The rise of Hitler and the Nazis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Life in Nazi Germany</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Germany during the Second World War</td>
</tr>
<tr>
<td>Autumn 2021</td>
<td>Conflict, Crisis, and Change: The Middle East, 1919-2012</td>
<td>· Build-up of tension in Palestine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The creation of Israel and the war of 1948-9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The Suez Crisis of 1956</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The Arab-Israeli conflicts of 1967 and 1973</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Superpower involvement in the Middle East</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The attempts to find a lasting peace, 1979-2012</td>
</tr>
<tr>
<td>Spring 2022</td>
<td>A Divided Union: Civil Rights in the USA, 1945-1974</td>
<td>· McCarthyism and the Red Scare</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Civil Rights in the 1950s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The impact of Martin Luther King and of Black Power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Protest movements: students, women, anti-Vietnam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Nixon and Watergate</td>
</tr>
</tbody>
</table>

How it is assessed
Students will take no public exams in their first year of the course and will be entered for the summer 2022 examination which will consist of two 90-minute exams, each worth 50% of the final grade:

<table>
<thead>
<tr>
<th>Paper 1</th>
<th>A three-part question with a single source on inter-war and Nazi Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A three-part question with a single source on the USA during the civil rights period</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paper 2</th>
<th>A three-part question, including multiple sources, on the First World War</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A three-part question on the Middle East</td>
</tr>
</tbody>
</table>

Why study History?
History looks at the countries, ideas, events, and individuals that have shaped the 20th and 21st centuries and helped create the world in which we live: it is about real people doing real things, the results of which still affect us today. The IGCSE course covers some of the most important and interesting events of recent history. Students will therefore find that their study of IGCSE History is not limited to the past, but often emerges on today’s front pages. Through studying the content, students develop skills of written and spoken communication, balanced argument, critical use of evidence, essay writing, structured analysis and understanding how and why things happen. History therefore opens doors to careers in journalism, law, media, politics, and many other fields. It is seen by top universities as one of the most respected subjects to study at A Level and GCSE.

The department celebrated excellent results in 2019 with 54% of students gaining a Level 9 and 80% gaining a Level 8 or 9.

Enrichment opportunities
1. Battlefields trip. We intend to run a trip to Ypres in 2021 to consolidate knowledge of the First World War.
2. There are opportunities for discussion groups and film nights.
3. In alternate years there is a trip in October to Munich, Berlin and Nuremburg.
4. Reading lists are provided with chances to discuss reading.
LATIN

Exam board: OCR

Specification

Course content

Students continue their study of the Latin language, learning and becoming familiar with increasingly complex sentence structure and beginning to tackle more regularly extended passages of Latin that encourage them to apply all their previous knowledge and expertise, rather than focus on one particular area at a time. From around February of the Fifth Form students will begin reading their set texts. This involves reading selected and unadapted passages by Roman authors as a preparation for discussion and exploration as works of literature. Students therefore develop their abilities to respond critically and sensitively to material and may explore such areas as how an author seeks to persuade or entertain an audience, the morals and values of a society other than their own, or even cultural bias.

How it is assessed

GCSE Latin is assessed entirely by examination at the end of the course. There are then three papers, one for language that contributes 50% of the total mark, and one for each set text, each contributing 25% of the total. The language paper has one story taken from a social or mythological setting which tests core skills with comprehension and a small amount of translation, then a second story taken from history that tests knowledge in more detail, with more advanced translation. This type of assessment follows on naturally from what girls are already doing in the Lower Fifth. The prose and verse set text papers each have the same format and require students to answer questions about the texts they have already seen and studied; these questions range from straightforward factual comprehension to literary analysis. Since September 2016 Latin has been assessed on the new tariff, grading from 9-1.

Benefits of studying Latin

Latin at GCSE offers students a unique and highly respected form of intellectual challenge and stimulation, with a wide portfolio of critical, analytical and communicative skills, as well as being a richly rewarding area of study in and of itself. They will develop a blend of skills that, as well as being of great benefit in their own right, enhance and complement skills used and developed in many other subject areas. It is, along with Greek, the only GCSE to give pupils the opportunity to read literature in a language other than English. The nature of the language and the study of this literature helps students to develop a disciplined approach to the handling of unfamiliar information, and then to communicate what they have worked out in a clear and accurate way. As well as enhancing pure linguistic skills, Latin GCSE offers an opportunity for students to develop their powers of analysis and interpretation, as well as learning to communicate knowledge and thoughts effectively and convincingly. It is hard to think of any professional career in which these attributes are not of benefit.
MATHEMATICS
Exam board: Edexcel
Specification

Course content (4MA1):

- Number
- Algebra
- Geometry and measures
- Statistics and Probability

Mathematics is an important subject both in its own right and as the basis of many other subjects. It is compulsory for Lower Fifth, Fifth and Upper Fifth. There is no coursework. In the light of recent changes to both IGCSE and GCSE, the Mathematics Department have decided that, in the best interests of students, we will continue with IGCSE. The new 9-1 Mathematics IGCSE, in line with the new GCSE, has substantially increased content in comparison to previous syllabi and the level of demand of this new IGCSE is also considerably increased. Our intention would be for all girls to sit the Higher Tier exam, which gives access to Grades 3–9, but there would be the possibility of sitting the Foundation Tier papers, covering Grades 1–5, if it was felt after discussion that this was more appropriate for individual students.

There is a much greater focus on problem-solving in this new course. Students in the top divisions will normally also study the AQA Further Maths course, which is a Level 2 course, the equivalent of a second GCSE in Maths, extending students beyond GCSE to prepare for A Level.

In Lower Fifth we start by consolidating basic numeracy topics, such as directed numbers, order of operations and standard form. We move on to simplifying algebra and solving equations, sets, graphs, geometry, probability and statistics before continuing with further study in each of these categories; the remainder of the course covers all areas in turn, providing variety and increasing challenge. Revision usually starts by the Easter holidays of the Upper Fifth year, at the latest, and includes past examination paper practice and the use of various websites and other resources.

How it is assessed
Two written papers, each of 2 hours duration, all taken at the end of the course in the Upper Fifth year. Papers are equally weighted and lead to Grades 9 -1. Calculators are permitted in both papers.

Benefits of studying Mathematics
Not only does a good grounding in Mathematics support study of the sciences, Geography, Psychology and Economics amongst others, but it also fosters valuable skills in analysing data, problem-solving and logical thinking. Mathematics is a subject that is beautiful and challenging in its own right, as well as being highly respected by employers and universities. A Grade 5 (a ‘good’ pass), or above, will be required for entry to almost all university courses.

Enrichment opportunities
National Maths Challenges at all levels, both individual and team events, Maths Competitions and Maths lectures and problem-solving days.
**MODERN FOREIGN LANGUAGES**
**FRENCH**

**Exam board:** AQA  
**Specification**

Course content and how it is assessed

| Unit 1 | **Listening in French**  
Understanding and responding to different types of spoken language |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skill</strong></td>
<td><strong>Timing/Description</strong></td>
</tr>
</tbody>
</table>
| | 45 minutes + 5 minutes reading time | Final examination set and marked by AQA  
Content relates to prescribed themes* | 25% |

| Unit 2 | **Speaking in French**  
Communicating and interacting effectively in speech for a variety of purposes |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skill</strong></td>
<td><strong>Timing/Description</strong></td>
</tr>
</tbody>
</table>
| | 10–12 minutes + preparation time  
Oral consisting of:  
Role-play (2 minutes)  
Photo card (3 minutes)  
General conversation (5–7 minutes) | Internally assessed by the centre and externally moderated by AQA | 25% |

| Unit 3 | **Reading in French**  
Understanding and responding to different types of written language |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skill</strong></td>
<td><strong>Timing/Description</strong></td>
</tr>
</tbody>
</table>
| | 1 hour  
Section A  
Questions in English, to be answered in English or non-verbally  
Section B  
Questions in French, to be answered in French or non-verbally  
Section C  
Translation from French into English | Final examination set and marked by AQA  
Content relates to prescribed Themes* | 25% |

| Unit 4 | **Writing in French**  
Communicating effectively in writing for a variety of purposes |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skill</strong></td>
<td><strong>Timing/Description</strong></td>
</tr>
</tbody>
</table>
| | 1 hour 15 minutes  
Question 1  
Structured writing task (90 words) from a choice of two questions  
Question 2  
Open-ended writing task from a choice of two questions (150 words)  
Question 3  
Translation from English into French (min 50 words) | Final examination set and marked by AQA  
Content relates to prescribed themes* | 25% |

**Core content***

**Identity and culture** (Relationships with family and friends, marriage/partnership, social media, mobile technology, music, cinema and TV, food and eating out, sport); **Local, national, international and global areas of interest** (Home, town, neighbourhood and region, social issues, charity/voluntary work, healthy/unhealthy living, the environment, poverty/homelessness, travel and tourism); **Current and future study and employment** (My studies, life at school/college, education post-16, jobs, career choices and ambitions).

**Benefits of studying French** While studying French, every student will gain an understanding of this language in a variety of contexts and the ability to communicate effectively in French. This will also result in awareness and understanding of countries and communities where French is spoken.

**Enrichment opportunities** The study of a foreign language and culture is in itself a source of enrichment. Many links are made available on the student Portal to areas as diverse as the French press, French literature or grammar exercises. When time permits, we may show the students French films, and the School Library has a wealth of books and films available. Potential high-flyers will be encouraged to start an exploration of French literature. Finally, all staff are keen to foster the interests of individual students and to suggest to them ways of taking them further.
MANDARIN CHINESE
Exam board: AQA

Specification

Learning the Chinese language for GCSE has proved to be not only very interesting, but highly rewarding. In the modern world careers and future prospects are at the forefront of our minds. China has become central in the economic, business and political arenas. Studying Chinese can offer skills and insight for students to be one step ahead in a fast changing environment.

At Benenden, we provide the AQA Mandarin Chinese GCSE course to our non-native Fifth and Upper Fifth students. The students will have two lessons per week with one-hour duration for each lesson. In the Upper Fifth, students will each have a thirty minute conversation session every week with our Hanban teacher.

We also offer our bilingual or heritage Chinese students two lessons per week with one-hour duration for each lesson to study the Mandarin Chinese GCSE course. Sometimes these lessons will be scheduled at lunchtime due to timetabling and staffing restrictions. Students who are sufficiently advanced may follow a fast-track programme.

The Mandarin Chinese GCSE course enables students to realise their full potential in Chinese language studies. The Fifths studying Mandarin will have learned the language for at least one year. We aim to build on the foundation study and continue widening students’ conversational, reading and writing skills on a range of topics and prepare them to succeed in GCSE exams and for further study, i.e. GCSE to Cambridge Pre-U Mandarin Chinese.

Specification overview
- GCSE Chinese (Spoken Mandarin) has a Foundation Tier (grades 1-5) and a Higher Tier (grades 4-9).
- Students will sit all their exams at the end of the course and must take all four question papers at the same tier.
- All papers will be set and marked by AQA.

Subject core content
Students study all of the following themes on which the assessments are based:
- Theme 1: Identity and culture
- Theme 2: Local, national, international and global areas of interest
- Theme 3: Current and future study and employment

Assessments
- Papers will be tiered, with 25% assessment weightings per skill (listening, speaking, reading, and writing).
- All Benenden students will be entered for Higher Tier exams.

  Paper 1: Listening – 45 minutes; 50 marks
  Paper 2: Speaking – 10-12 minutes + preparation time; 60 marks
  Paper 3: Reading – 1 hour; 60 marks
  Paper 4: Writing – 1 hour 15 minutes; 60 marks

Enrichment opportunities
UCL IOE Confucius Institute / Hanban China Summer Study Camps; British Council Mandarin Speaking Competition; presenting and organising Benenden Chinese New Year, Dragon Boat and Mid-Autumn Festival prayers and events.

Related careers
Traineeships and working for western manufacturing companies, trading, consultancy, banking, multinationals in Europe, China, Hong Kong, Taiwan or Chinese companies in Europe; Government departments of economics, internal and external affairs, foreign service; journalism; travel agent; interpreter; academics; education (teaching); publishing; support of companies and knowledge institutes entering the Chinese market via local, regional, provincial organisations.
MANDARIN CHINESE Early Entry for Pre-U (A-Level Equivalent)
Exam Board: Cambridge Pre-U Mandarin Chinese (Principal Course 9778)
Syllabus

Qualifications needed: GCSE Mandarin Chinese, ideally at grade 8 or 9.

For bilingual or heritage Chinese students, we offer Cambridge Pre-U Chinese (A-Level equivalent) via the Benenden bilingual learning route for a possible early entry to the exams, as a two- or three-year course depending on the individual’s capability. Students who are sufficiently advanced may follow this fast-track programme. We would recommend them to start the course no earlier than Vth, with the exams being take in the Sixth Form.

There are a total of 4 papers, all to be taken in the same year - ideally when students are in VI.1 or VI.2 unless they are very mature and capable:

Paper 1: Speaking
Paper 2: Listening, Reading and Translation
Paper 3: Writing
Paper 4: Chinese economics and literature

Each year, we offer 3 modules to the bilingual students to facilitate them for the exams, one hour per module per week. Sometimes these lessons will be scheduled at lunchtime due to timetabling and staffing restrictions. Students may consider to taking 2-3 years to complete these modules, e.g. 1-2 modules per year:

1) Pre-U language (paper 2 and paper 3)
2) Pre-U literature (paper 4) and Speaking (paper 1)
3) Pre-U economics (paper 4)

On top of these, our Hanban teacher will offer a group post-GCSE conversation lesson for the bilingual students to retain their Mandarin communicative skills as part of the school extra-curriculum activities.

Related careers:
Traineeships and working for western manufacturing companies, trading, consultancy, business, banking, multinationals in Europe, China, Hong Kong, Taiwan or Chinese companies in Europe; government departments of economics, internal and external affairs, foreign service; journalism; travel agent; interpreter; academics; education (teaching); publishing; support of companies and knowledge institutes entering the Chinese market via local, regional, provincial organisations.

Key questions to consider:

- How has China changed over the past forty years?
- Could you critically evaluate the pros and cons of the changes?
- What are the fundamental differences between Chinese and western societies?
- Have core Chinese values changed over time? Are the modern values more in line with Anglo Saxon thinking?
- Have you learned anything particularly surprising from what you read about China?
The department generally uses AQA as the exam board for GCSE. Bilingual students, heritage speakers or very advanced students who are significantly above the proficiency of their year group may sit the IGCSE exam given by Cambridge.

Course content and how it is assessed

<table>
<thead>
<tr>
<th>Paper</th>
<th>Skill</th>
<th>Timing/Description</th>
<th>Marking</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 1</td>
<td>Listening</td>
<td>Written exam: 45 minutes (Higher Tier) • Section A – questions in English • Section B – questions in Spanish</td>
<td>Final examination set and marked by AQA • 50 marks (Higher Tier)</td>
<td>25%</td>
</tr>
<tr>
<td>Paper 2</td>
<td>Speaking</td>
<td>10–12 minutes (Higher Tier) + preparation time • Role-play – 2 minutes • Photo card – 3 minutes • Conversation – 5-7 minutes</td>
<td>Internally assessed by the centre and externally moderated by AQA • Role-play (15 marks) • Photo card (15 marks) • Conversation (30 marks)</td>
<td>25%</td>
</tr>
<tr>
<td>Paper 3</td>
<td>Reading</td>
<td>Written exam: 1 hour (Higher Tier) • Section A – questions in English • Section B – questions in Spanish • Section C – translation to English</td>
<td>Final examination set and marked by AQA • 60 marks</td>
<td>25%</td>
</tr>
<tr>
<td>Paper 4</td>
<td>Writing in Spanish</td>
<td>Written exam: 1 hour 15 minutes (Higher Tier) • Question 1 – 90 word writing task • Question 2 – 150 word writing task • Question 3 – Translation to Spanish</td>
<td>Final examination set and marked by AQA • Question 1 – 16 marks • Question 2 – 32 marks • Question 3 – 12 marks</td>
<td>25%</td>
</tr>
</tbody>
</table>

Common themes
The new specification covers three distinct themes. Students are expected to understand and provide information and opinions about these themes relating to their own experiences and those of other people, including people in countries/communities where Spanish is spoken. They are: 1. Identity and culture 2. Local, national, international and global areas of interest 3. Current and future study and employment.

Why study Spanish?
Spanish is spoken by an estimated 420 million people around the world and is currently the second most commonly spoken language worldwide. Learning Spanish provides a wealth of opportunities personal and professional. Thinking of working in the USA, Latin America or Spain? Spanish will be an incredible asset. Do you love to travel, see new places and try new foods? Spanish can be your passport. Hoping to be an entrepreneur? The Spanish-speaking market will give you access to hundreds of millions of potential customers. Do you want to work in philanthropy? Non-governmental organisations are always in need of Spanish-speaking employees and volunteers. Spanish can be your ticket to the future!
MUSIC
Exam Board: Edexcel
Specification

Course content
The course comprises performing, composing and listening/appraising.

Performing (30% - internally assessed, externally moderated)
Students submit one solo and one ensemble piece of around Grade 5 standard by the end of the course. Recordings are sent for moderation at the start of the Summer Term of the GCSE year. All students are encouraged to build up a portfolio of performances over the two years via the Friday lunchtime recital series.

Composing (30% - internally assessed, externally moderated)
Students submit two compositions amounting to at least three minutes' duration. One is a free composition, and the other a response to a brief set by Edexcel in the September of the exam year. These are sent for moderation at the start of the Summer Term of UV, together with a recording of the pieces which can involve 'live' musicians or be taken directly as a sound file from the Sibelius software. Students compose in various styles across the two-year course but are encouraged to develop their own interests and style alongside the exam criteria.

Appraising (40% - externally assessed)
This written examination is based around the study of 8 set works, ranging from staples of the classical repertoire by Bach and Purcell to the likes of Queen, Wicked and John Williams. The exam is divided into two Parts - Section A involves short answers on 6 of the 8 works, a short melody completion exercise, and a question on an unfamiliar piece relating to its musical elements and context. Section B asks the students to respond to a recording played several times in the exam and compare and/or evaluate one of the set works with one unfamiliar piece of music.

Why study Music?
Music sits well alongside any combination of GCSE choices, and is widely respected by universities who rank it in their top bracket of academic choices. It combines practical application with intellectual study and gives you an insight into the world’s greatest art form. Students relish the fact that the working pattern and coursework deadlines offer a contrast from their other subjects, and simply that a love of music can be applied in an academic context.

We cater for a wide range of interests, approaches and abilities. It is expected that candidates will have individual lessons and are involved with an ensemble and/or choir. Free theory lessons are available to those looking to consolidate and improve their musical understanding.
## PHYSICAL EDUCATION

**Exam board:** Edexcel  
**Specification**

### Course content

<table>
<thead>
<tr>
<th>UNIT</th>
<th>OUTLINE</th>
</tr>
</thead>
</table>
| Components 1 and 2  
The Theory of Physical Education – 60% of the total GCSE | **Component 1. Fitness and Body Systems 36% of the qualification**  
- Applied anatomy and physiology  
- Movement analysis  
- Physical training  
- Use of data  
**Overview of content**  
- Consider how the skeletal, muscular, cardiovascular and respiratory systems work together during performance in physical activity and sport.  
- Lever systems and planes and axis of movement and their relevance in different sports.  
- Principles and methods of training. The components of fitness, how they are measured, appropriate training methods to develop them and training principles to ensure the training methods are effective.  
- The use of data analysis.  
**Component 2. Health and Performance 24% of the qualification**  
- Health, fitness and wellbeing  
- Sport psychology  
- Socio-cultural influences  
- Use of data  
**Overview of content**  
Pupils will be developing knowledge and understanding of the psychological factors that can affect performers in physical activity and sport and the socio-cultural factors and their impact. The course also looks at the impact of sport on society and the benefits of participating in physical activity and sport on health, fitness and wellbeing.  
**Overview of assessment**  
- This unit is assessed through two externally set examinations  
| Components 3 and 4  
Performance in Physical Education – 40% of the total GCSE | **Overview of content**  
**Practical performance (30%)**  
Students will be required to  
- Perform in three different activities in the role of player/performer. One must be a team sport, one individual, and the third being either team or individual from a DFE approved list.  
- Demonstrate their skills in isolation/unopposed situations and in a formal/competitive situation whilst under pressure.  
- Focus on the three phases of preparation, execution and recovery in the chosen three activities, demonstrating a level of technical accuracy to reflect an established perfect model.  
**Performance analysis (10%)**  
- Plan and undertake a six-week Personal Exercise Programme to improve their fitness and performance, and be able to analyse and evaluate their PEP through the use of data.  
- Submit PEP (1500 words) based on one method of training.  
**Overview of assessment**  
- This unit is assessed under controlled conditions.  
- This unit is externally moderated. |
Benefits of studying Physical Education

For students who enjoy sport and wish to develop their own skills and knowledge, the Edexcel GCSE Physical Education specification encourages students to be inspired, moved and challenged by following a broad, satisfying and worthwhile course of study. This course has many aspects in common with the work studied in Biology. The practical elements are all assessed within squad time or else are recorded outside of school for sports such as horse-riding. For girls interested in psychology, technology, fitness testing, analysing performance and how the body copes with being pushed to its maximum on the sports field, this is a really interesting course.

Enrichment opportunities

Enrichment and additional learning experiences include attendance at Girls Go Gold Conference, various lectures and training days with elite sportsmen and women. A variety of degree courses at prestigious universities can lead to careers in broadcasting, journalism, nutrition, photography, events management, physiotherapy, marketing and much more!
RELIGIOUS STUDIES (Philosophy & Religion)

Exam board: AQA Specification A

Specification

Course Content:

Paper One: The study of religions: beliefs, teachings and practices (50%)
Paper Two: Philosophical and ethical studies (50%)

Both written papers will be sat at the end of the UV year and are 1 hour 45 minutes each.

Paper One: The study of religions: beliefs, teachings and practices (Fifth Form and Upper Fifth Form, 50%)

Students will study the beliefs, teachings and practices of Christianity and Islam. They will consider the influence and impact of these beliefs on various communities and societies, including contemporary Britain. Common and divergent views within the religions will be explored. Students will be able to compare and contrast the two religions and use their understanding to help them explore the ethical and philosophical issues in Paper Two.

<table>
<thead>
<tr>
<th>Christianity</th>
<th>Islam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beliefs:</strong></td>
<td><strong>Beliefs:</strong></td>
</tr>
<tr>
<td><em>Key beliefs</em></td>
<td><em>Key beliefs</em></td>
</tr>
<tr>
<td>• What is God like? Belief in the God of classical theism</td>
<td>• The articles of faith</td>
</tr>
<tr>
<td>• The doctrine of the Trinity</td>
<td>• What is God like?</td>
</tr>
<tr>
<td>• How was the universe created? Creation narratives</td>
<td>• The nature of God and oneness (tawhid)</td>
</tr>
<tr>
<td>• What do Christians believe about the afterlife?</td>
<td>• Predestination and the afterlife</td>
</tr>
<tr>
<td><strong>Jesus Christ and salvation</strong></td>
<td><strong>The Prophet Muhammad and the Qur’an</strong></td>
</tr>
<tr>
<td>• Who was Jesus? What is meant by the incarnation?</td>
<td>• What is prophethood?</td>
</tr>
<tr>
<td>• Crucifixion, resurrection and ascension: a look at the gospels</td>
<td>• Who was Muhammad?</td>
</tr>
<tr>
<td>• The doctrines of sin and salvation</td>
<td>• What is the Qur’an and how was it composed?</td>
</tr>
<tr>
<td>• Atonement</td>
<td>• What are the key ideas in the Qur’an?</td>
</tr>
<tr>
<td><strong>Practices:</strong></td>
<td><strong>Practices:</strong></td>
</tr>
<tr>
<td><em>Worship and festivals</em></td>
<td><em>Worship and festivals</em></td>
</tr>
<tr>
<td>• Different forms of worship and their significance</td>
<td>• What are the five pillars of Islam in Sunni Islam, and the additional duties of Shi’a Muslims?</td>
</tr>
<tr>
<td>• Prayer</td>
<td>• What is the Shahadah?</td>
</tr>
<tr>
<td>• What are the sacraments?</td>
<td>• Salat, Zakat, Sawm, Hajj</td>
</tr>
<tr>
<td>• Pilgrimage</td>
<td>• What is jihad? What different meanings does jihad have?</td>
</tr>
<tr>
<td>• The meaning and significance of Christian festivals</td>
<td>• The meaning and significance of Muslim festivals such as Eid ul-Adha and Eid ul-Fitr</td>
</tr>
<tr>
<td><strong>The role of the Church in the local and worldwide community</strong></td>
<td><strong>The role of the Imamate in Shi’a Islam</strong></td>
</tr>
<tr>
<td>• Food banks and street pastors – how do they help?</td>
<td></td>
</tr>
</tbody>
</table>
Paper Two: Philosophical and ethical studies (Fifth Form and Upper Fifth Form 50%)

Students will consider different religious, philosophical and ethical arguments and their impact and influence on the modern world. They will learn about different perspectives on the issues within and between religions, as well as non-religious views. Students will learn how to evaluate these issues independently and come to an informed viewpoint of their own.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Outline: Religious teachings, beliefs and attitudes towards:</th>
</tr>
</thead>
<tbody>
<tr>
<td>B: Religion and Life</td>
<td>The origins and value of the universe</td>
</tr>
<tr>
<td></td>
<td>• Religious teachings about the origin of the universe</td>
</tr>
<tr>
<td></td>
<td>• Relationship between scientific and religious views</td>
</tr>
<tr>
<td></td>
<td>• Stewardship</td>
</tr>
<tr>
<td></td>
<td>• Environmental ethics</td>
</tr>
<tr>
<td></td>
<td>• Animal rights</td>
</tr>
<tr>
<td></td>
<td>The origins and value of human life</td>
</tr>
<tr>
<td></td>
<td>• Relationship between scientific and religious views on how life began</td>
</tr>
<tr>
<td></td>
<td>• Concepts of sanctity and quality of life</td>
</tr>
<tr>
<td></td>
<td>• Abortion</td>
</tr>
<tr>
<td></td>
<td>• Euthanasia</td>
</tr>
<tr>
<td>C: The Existence of God and Revelation</td>
<td>Philosophical arguments for and against the existence of God</td>
</tr>
<tr>
<td></td>
<td>• The design argument, including strengths and weaknesses</td>
</tr>
<tr>
<td></td>
<td>• The cosmological argument, including strengths and weaknesses</td>
</tr>
<tr>
<td></td>
<td>• Miracles</td>
</tr>
<tr>
<td></td>
<td>• The philosophical problem of evil and suffering</td>
</tr>
<tr>
<td></td>
<td>• Religion vs science?</td>
</tr>
<tr>
<td></td>
<td>The nature of the divine and revelation</td>
</tr>
<tr>
<td></td>
<td>• Special revelations, eg visions – do they tell us anything about God?</td>
</tr>
<tr>
<td></td>
<td>• Enlightenment</td>
</tr>
<tr>
<td></td>
<td>• General revelation: nature and scripture</td>
</tr>
<tr>
<td>D: Crime and Punishment</td>
<td>Religion, crime and the causes of crime</td>
</tr>
<tr>
<td></td>
<td>• Good and evil actions / people - what is evil?</td>
</tr>
<tr>
<td></td>
<td>• Possible reasons for crime</td>
</tr>
<tr>
<td></td>
<td>• Different types of crime</td>
</tr>
<tr>
<td></td>
<td>Religion and punishment</td>
</tr>
<tr>
<td></td>
<td>• The aims of punishment, eg deterrence, reformation, retribution</td>
</tr>
<tr>
<td></td>
<td>• Types of punishment, eg prison, corporal punishment, community service</td>
</tr>
<tr>
<td></td>
<td>• Forgiveness</td>
</tr>
<tr>
<td></td>
<td>• The death penalty</td>
</tr>
<tr>
<td>G: Human Rights and Social Justice</td>
<td>Religious and philosophical arguments regarding human rights</td>
</tr>
<tr>
<td></td>
<td>• Human rights</td>
</tr>
<tr>
<td></td>
<td>• Status of women in religion</td>
</tr>
<tr>
<td></td>
<td>• Freedom of expression</td>
</tr>
<tr>
<td></td>
<td>Religious and philosophical arguments regarding social justice</td>
</tr>
<tr>
<td></td>
<td>• Prejudice and discrimination – race, disability, sexuality</td>
</tr>
<tr>
<td></td>
<td>• Attitudes to wealth</td>
</tr>
<tr>
<td></td>
<td>• Exploitation of the poor</td>
</tr>
</tbody>
</table>

Why choose Religious Studies (Philosophy & Religion)?

GCSE Religious Studies/Philosophy & Religion offers a fascinating academic challenge, enabling students to confront belief, values, meaning, purpose and truth. Students will gain an appreciation of how religion, philosophy and ethics form the basis of our culture when they investigate moral and philosophical questions. They will develop analytical and critical thinking skills, the ability to work with abstract ideas, leadership and research skills. This GCSE offers excellent preparation for A Levels, a degree and future employment in our increasingly diverse society.
SCIENCE

We will be following the Edexcel IGCSE Science courses at GCSE level. All students study Biology, Chemistry and Physics as separate subjects, taught by subject specialists. Each subject has two lessons per week thus every student has six hours of science per week.

The courses are designed to be interesting and inspiring modern specifications. At the end of the science courses pupils should have enough knowledge to make sense of the many scientific issues that we encounter in our lives today.

Key features and benefits of this specification are:-

- aspects of science appropriate for the 21st Century
- a straightforward linear assessment
- assessment of investigative skills through an examination paper rather than through controlled assessment. This will enable us to develop the practical element of the GCSE Science courses and to tailor it to a pupil’s needs.
- Provides a sound foundation for progression to AS and A Level Sciences

In terms of progression, the design of the course provides a basis for further study in GCE Advanced Subsidiary and Advanced Level Biology, Chemistry and Physics. The relationship of assessment to the qualifications available is shown below.

Each student will be guided by their teachers as to the most appropriate qualification during the course but will continue with six hours of science.
BIOLOGY
Exam board: Edexcel IGCSE

Specification

The Edexcel IGCSE in Biology enables students to:
- acquire knowledge and understanding of biological facts, concepts and principles
- develop an appreciation of the significance of biological facts, concepts and principles and the skills needed for their use in new and changing situations
- appreciate the importance of accurate experimental work to scientific method and reporting
- form hypotheses and design experiments to test them
- sustain and develop an enjoyment of, and interest in, the study of living organisms
- evaluate, in terms of their biological knowledge and understanding, the benefits and drawbacks of scientific and technological developments, including those related to social, environmental and economic issues.

Section 1: The nature and variety of living organisms
In this section girls will recall the basic characteristics that all organisms possess and will learn about the common features shared by organisms within the following main groups, plants, animals, fungi, bacteria, protocists and viruses. Girls will also be introduced to the term pathogen and will learn about the variety of pathogens in our environment, with specific case examples.

Section 2: Structure and functions within living organisms
Girls will learn about the levels of organisation within organisms, plant and animal cell structure, movement of substances into and out of cells, plant and human nutrition, respiration, gas exchange, transport, excretion and movement and co-ordination, both within plants and humans. Girls will have the opportunity to carry out a multitude of practical experiments within this section with the aim of improving understanding and developing practical skills.

Section 3: Reproduction and inheritance
In this section, girls will learn about reproduction in both flowering plants and humans. They will then be introduced to protein synthesis, genetics, specifically genetic crosses, cell division, natural selection and evolution. We envisage that this will also encompass modern genetic developments such as stem cell technology in order to make girls aware of the dynamic field of genetic research through independent research and active discussion.

Section 4: Ecology and the environment
Girls will be introduced to ecological terms and definitions, with progression onto feeding relationships, ecological cycles and finally human influences on the environment. Use of the eco-classroom and Benenden's grounds will be integrated into this unit.

Section 5: Use of biological resources
In this section, girls will learn about food production, from crops to the use of micro-organisms and fish farming. Within this context, girls will then learn applied genetics, such as selective breeding, cloning and genetic modification. This section will incorporate specific practical techniques such as cloning and genetic manipulation.

Assessment
The Biology IGCSE will be assessed via two papers. Paper 1 which is a 2 hour paper, making up 61% of the total IGCSE, and a 1 hour 15 minute paper, making up 39% of the total IGCSE. Both are sat in the summer exam period.
CHEMISTRY
Exam board: Edexcel IGCSE

Specification

The IGCSE in Chemistry qualification enables our girls to:-

- learn about the unifying patterns and themes of chemistry
- appreciate the practical nature of chemistry, acquiring experimental and investigative skills based on correct and safe laboratory techniques
- appreciate the importance to scientific methods of accurate experimental work and reporting, form hypotheses and design experiments to test them
- develop a logical approach to problem solving in a wider context
- understand the widespread importance of chemistry and the way materials are used in the world
- appreciate how the work of the chemist has social, industrial, technological, environmental and economic consequences for the community
- prepare for more advanced courses in chemistry and for courses which require them to have a knowledge of chemistry.

Section 1: Principles of Chemistry
In this section the girls will be introduced to the fundamental principles of chemistry such as states of matter, the particulate nature of matter, atomic structure, chemical formulae and equations, chemical bonding and electrolysis.

Section 2: Inorganic Chemistry
In this section girls will be investigating one of the most important concepts in chemistry; the periodic table. Students will study the structure of the periodic table and learn about the chemistry of Group I and VII. They will also study the chemistry of oxygen and hydrogen, acids bases and salts, as well as the reactivity series for metals and methods of extraction. This section also includes an introduction to chemical analysis with the identification of ions and gases.

Section 3: Physical Chemistry
In this section girls will study the chemical theory that underlies the chemical reactions they have studied in the other sections. The girls will learn how fast and how far chemical reaction can proceed and how and why chemical reactions always result in a change in energy.

Section 4: Organic Chemistry
In the final section of the course the girls will be introduced to the world of organic chemistry starting with a look at crude oil and the chemicals that can be derived from it. We then study groups of organic compounds in more detail such as alkanes, alkenes, alcohols, carboxylic acids and esters. We end the unit with a section on the formation and use of synthetic polymers.

The girls will be assessed at the end of the course with two written exam papers. Paper 1C is a 2 hour paper and covers the content that is common to chemistry IGCSE and the Dual Award Science qualification. Paper 2C is a 1 hour 15 minute paper and can cover all of the content of the Chemistry specification. Both papers have a mixture of question styles, multiple choice, short answer, calculations, and extended open-response questions.
The Edexcel IGCSE in Physics enables students to:-

- acquire a systematic body of scientific knowledge and the skills needed to apply this in new and changing situations in many domestic, industrial and environmental contexts.
- appreciate the practical nature of physics, acquiring experimental and investigative skills based on correct and safe laboratory techniques.
- appreciate the importance of accurate experimental work and reporting to scientific method.
- form hypotheses and design experiments to test them.
- evaluate, in terms of their scientific knowledge and understanding, the benefits and drawbacks (including social, environmental and economic) of scientific and technological developments.
- select, organise and present information clearly and logically, using appropriate scientific terms and conventions.

Section 1: Forces and motion
This unit introduces students to the theory of motion. This important area of science deals with the description of motion and Newton’s Laws.

Section 2: Electricity
In this section students learn about the electrical forces that underlie all of physics. Students also learn the basic principles behind electrical circuits, covering voltage, current, resistance, and the use of a range of electrical components.

Section 3: Waves
In this section the students are introduced to the general theory of waves, and they go on to look at the behaviour of light and sound waves in more detail. The uses of the different parts of the electromagnetic spectrum are also covered.

Section 4: Energy resources and energy transfer
This interesting section covers a range of topics. It starts with a study of the processes of heat flow and moves on to a quantitative consideration of kinetic energy, potential energy, and work. The students consider different methods of generating electricity, and the economic and environmental advantages and disadvantages associated with each.

Section 5: Solids, liquids, and gases
This unit covers the basic properties of the three states of matter and the associated phase transitions. Topics include density, pressure, buoyancy, and the behaviour of an ideal gas.

Section 6: Magnetism and electromagnetism
This section explores the properties of permanent magnets along with the deep connection between electricity and magnetism. Practical applications of the basic physics are also covered, such as motors, loudspeakers, microphones, and transformers.

Section 7: Radioactivity and particles
This section introduces students to the topic of radioactivity. The phenomena associated with unstable nuclei are described, along with their application to a range of uses in industry, medicine, and the generation of electrical power. Both fission and fusion are covered.

Section 8: Astrophysics
In this section students first learn about the Solar System and the Earth’s place in it. They then move on to study the birth, life, and death of stars. Finally, they learn about the evidence for the Big Bang theory of how the Universe has reached its present state.
DOUBLE SCIENCE
Exam board: Edexcel IGCSE
Specification

The Dual Science course is offered at the end of V to students whom we feel would benefit from slightly less content at a slightly slower pace: it still covers all three sciences and still takes 6 hours per week. It cannot be chosen from the start of V.

Course content
Biology: Section 1: The nature and variety of living organisms
        Section 2: Structures and functions in living organisms
        Section 3: Reproduction and inheritance
        Section 4: Ecology and the environment
        Section 5: Use of biological resources
Chemistry: Section 1: Principles of chemistry
          Section 2: Inorganic chemistry
          Section 3: Organic chemistry
          Section 4: Physical chemistry
Physics: Section 1: Forces and motion
          Section 2: Electricity
          Section 3: Waves
          Section 4: Energy resources and energy transfer
          Section 5: Solids, liquids and gases
          Section 6: Magnetism and electromagnetism
          Section 7: Radioactivity and particles
          Section 8: Astrophysics

Practical work is integrated into all these units, which is carried out in the highly equipped practical areas of our laboratories. There is no practical examination, although there are exam questions which relate to practical techniques.

How it is assessed? Assessment for this qualification is linear. There will be a range of compulsory, multiple-choice questions, short-answer questions, calculations and extended open-response questions. Short-answer structured questions in all papers are ramped to ensure accessibility for less able students, as well as to stretch the more able. Students may be required to perform calculations, draw graphs and describe, explain and interpret scientific phenomena. Some of the question content will be unfamiliar to students; these questions are designed to assess data-handling skills and the ability to apply scientific principles to unfamiliar situations. Questions targeted at levels 1-9 will include questions designed to test knowledge, understanding and skills at a higher level, including some questions requiring longer prose answers.

<table>
<thead>
<tr>
<th>Assessment overview</th>
<th>Marks</th>
<th>Duration</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 1 Biology</td>
<td>110</td>
<td>2 hours</td>
<td>33.3%</td>
</tr>
<tr>
<td>Paper 1 Chemistry</td>
<td>110</td>
<td>2 hours</td>
<td>33.3%</td>
</tr>
<tr>
<td>Paper 1 Physics</td>
<td>110</td>
<td>2 hours</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

The Paper 1 examination is the same paper as the first paper sat by girls taking the separate sciences at IGCSE. There are only three examinations for IGCSE Double Science, whereas for the separate sciences there are six in total.

The Assessment objectives will be examined as follows:

<table>
<thead>
<tr>
<th>Paper number</th>
<th>Assessment objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Paper 1</td>
<td>AO1* 12.7-14.0% 12.7-14.0% 6.3-7.0%</td>
</tr>
<tr>
<td>Chemistry Paper 1</td>
<td>AO2 12.7-14.0% 12.7-14.0% 6.3-7.0%</td>
</tr>
<tr>
<td>Physics Paper 1</td>
<td>AO3 12.7-14.0% 12.7-14.0% 6.3-7.0%</td>
</tr>
</tbody>
</table>
| Total for IGCSE | AO1= Knowledge and Understanding  
                 AO2= Application of Knowledge, Understanding, Analysis and Evaluation  
                 AO3= Experimental Skills, Analysis of Data, Evaluation of Data and Methods |
The final mark for the Double Award, is obtained by adding together the marks scored in Paper 1B, 1C and 1P. The raw marks are added together, to achieve a total mark for the qualification out of 330 marks. IGCSE Double Science is only taken by a minority of girls, the expectation is that all girls in the LV pursue the Triple Science course from the outset, and the decision about Triple/Double Science is taken at a later time in the IGCSE course.
HIGHER PROJECT LEVEL 2 QUALIFICATION (HPQ)

Exam board: AQA

Specification

This is an optional course which is taken as an independent programme outside timetabled lessons. Students may begin an HPQ at any point during their V year, including the summer holiday. Around 70 hours of work, including reading, spread over several months, is the norm. There is no exam, and the process is assessed as much as the final essay or product. Once a student’s title is approved, they are assigned a supervising member of staff and it is the student’s responsibility to arrange meetings with this person as their project develops.

Course content
The HPQ will develop and extend from one or more of the student’s study areas and/or from an area of personal interest outside her main programme of study. The HPQ will be based on a topic chosen by the student. There will be delivery of taught skills such as research techniques, writing bibliographies, referencing through footnotes and presentation skills. The student is meeting regularly with her supervisor to assess her progress. It will, however, involve extended autonomous work by the student.

The project must include a written report of 500 to 2000 words depending on the nature of the project. The student is required to
- choose an area of interest
- draft a title and aims of the project for formal approval
- plan, research and carry out the project
- deliver a presentation to a specified audience
- provide evidence of all stages and project development and production for assessment in form of a production log

Why undertake an HPQ?
The HPQ can be taken as an extension to their GCSE subjects. It allows the student to embark on a largely self-directed project. By taking responsibility for the choice and design of an individual project (or an individual role in a group project) the student
- becomes a more critical, reflective and independent learner
- develops and applies decision-making and problem-solving skills
- increases her planning, research, analysis, synthesis, evaluation and presentation skills
- learns to apply new technologies confidently
- demonstrates creativity, initiative and enterprise.

More and more universities are welcoming the HPQ as an indicator of realised skills and potential ability in the fiercely competitive arena of entrant selection. Universities see the HPQ as positive evidence of motivation to explore a subject in greater depth, as well as an opportunity for further development of analytical, critical thinking and independent research skills. It will also ease transition from Fifth Form to Sixth Form. Most students who complete an HPQ at Level 2 continue to do so at Level 3.

Enrichment opportunities
Independent research may lead to contact with national archives, university libraries or specialist organisations. Presentation skills improve the student’s confidence. There is also enrichment through widening an interdisciplinary as well as global perspective.

Examples of previous titles include:
“Why do people fall for fake news? Factors that contribute to the ‘Post-Truth Era’.”
“Can one train the mind to overcome performance anxiety in competitive sport?”
“Is prison a suitable punishment for a mentally-ill criminal?”
“How far can conformity explain the perception of beauty?”
<table>
<thead>
<tr>
<th>Subject</th>
<th>Board</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>Edexcel</td>
<td>1AA0</td>
</tr>
<tr>
<td>Art (Fine Art)</td>
<td>AQA</td>
<td>8202</td>
</tr>
<tr>
<td>Biology</td>
<td>Edexcel iGCSE</td>
<td>4BI1/4SD0</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Edexcel iGCSE</td>
<td>4CH1/4SD0</td>
</tr>
<tr>
<td>Chinese</td>
<td>AQA</td>
<td>8673</td>
</tr>
<tr>
<td>Classical Civilisation</td>
<td>OCR</td>
<td>J199</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CIE iGCSE</td>
<td>0984</td>
</tr>
<tr>
<td>Design Technology</td>
<td>AQA</td>
<td>8552</td>
</tr>
<tr>
<td>Drama / Theatre Studies</td>
<td>AQA</td>
<td>8261</td>
</tr>
<tr>
<td>English Language</td>
<td>Edexcel iGCSE</td>
<td>4EA1</td>
</tr>
<tr>
<td>English Literature</td>
<td>Edexcel iGCSE</td>
<td>4ET1</td>
</tr>
<tr>
<td>Extended Project</td>
<td>AQA</td>
<td>7992</td>
</tr>
<tr>
<td>French</td>
<td>AQA</td>
<td>8658</td>
</tr>
<tr>
<td>Geography</td>
<td>Edexcel iGCSE</td>
<td>4GE1</td>
</tr>
<tr>
<td>German</td>
<td>AQA</td>
<td>8668</td>
</tr>
<tr>
<td>Greek</td>
<td>OCR</td>
<td>J292</td>
</tr>
<tr>
<td>History</td>
<td>Edexcel iGCSE</td>
<td>4HI1</td>
</tr>
<tr>
<td>Italian</td>
<td>Edexcel</td>
<td>1IN0</td>
</tr>
<tr>
<td>Japanese</td>
<td>Edexcel</td>
<td>1JA0</td>
</tr>
<tr>
<td>Latin</td>
<td>OCR</td>
<td>J282</td>
</tr>
<tr>
<td>Maths</td>
<td>Edexcel iGCSE</td>
<td>4MA1</td>
</tr>
<tr>
<td>Maths (Further)</td>
<td>AQA Level 2 Certificate</td>
<td>8365</td>
</tr>
<tr>
<td>Music</td>
<td>Edexcel</td>
<td>1MU0</td>
</tr>
<tr>
<td>Physics</td>
<td>Edexcel iGCSE</td>
<td>4PH1/4SD0</td>
</tr>
<tr>
<td>PE</td>
<td>Edexcel</td>
<td>1PE0</td>
</tr>
<tr>
<td>Polish</td>
<td>AQA</td>
<td>8688</td>
</tr>
<tr>
<td>Religious Studies</td>
<td>AQA</td>
<td>8062</td>
</tr>
<tr>
<td>Russian</td>
<td>Edexcel</td>
<td>1RU0</td>
</tr>
<tr>
<td>Spanish</td>
<td>AQA</td>
<td>8698</td>
</tr>
</tbody>
</table>