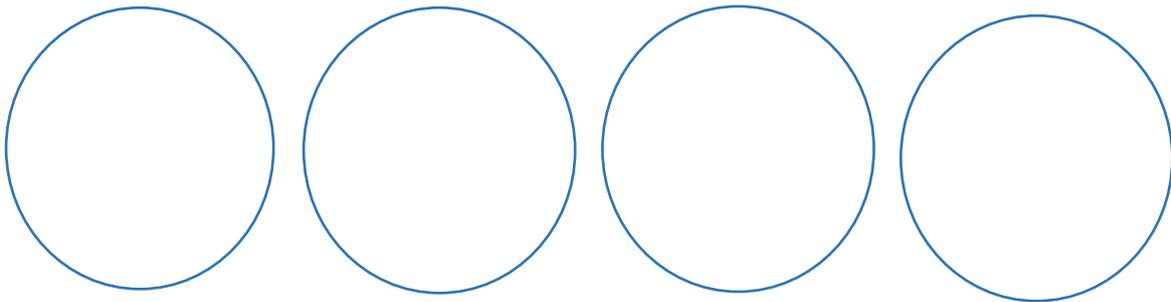


To find out more about the Baylis and Herschel Sixth forms, see their websites.



The Herschel
Consortium
Course Information – Entry 2021



HERSCHEL CONSORTIUM SIXTH FORM CHARTER

Responsibility

Success

Care

What can you expect?	What are your responsibilities?
A high standard of teaching – effective, engaging, challenging lessons and regular feedback	To work hard both inside and outside the classroom; to listen, act on feedback and be proactive in promoting your own learning; to strive to meet your academic targets; to meet deadlines
Lessons that begin on time	Full attendance unless there is a very good reason; to be punctual at all times
Facilities for independent learning; opportunities to develop new skills	To manage your own time appropriately and to develop as an independent learner
A willingness of staff to listen and to build positive, working relationships with you	To respect staff and fellow students at all times; to be courteous and smartly dressed
Individual pastoral care and academic mentoring from tutors, Heads of Year, subject staff	To support one another in your learning – to take responsibility for one another's well being
A school that celebrates and rewards success as well as supporting you when you need additional help	To accept help when necessary and to work in partnership with your parents and staff to promote achievement
A safe and secure environment in which to work	To help and contribute to the school's security
Structured guidance on post-18 options and a fair reference that reflects your strengths	To act in a responsible and adult manner, helping the staff to run the school and acting as a role model to younger pupils
A community that values more than simply academic success and that fosters a range of enrichment and community-based activities	To engage fully in aspects of school life beyond your studies, including community involvement and helping to build a diverse, vibrant and stimulating Sixth Form environment

Herschel Grammar School

Northampton Avenue,
 Slough, Berkshire SL1 3BW
 Tel: 01753 520950
 Email: mail@herschel.slough.sch.uk
 Web: www.herschel.slough.sch.uk

Baylis Court School

Gloucester Avenue,
 Slough, Berkshire SL1 3AH
 Tel: 01753 531760
 Email: bayliscourt@bayliscourt.slough.sch.uk
 Web: www.bayliscourt.slough.sch.uk

How will I choose my subjects?

Your choice of subjects is an important decision - your future career could depend on it. Think carefully about the advice from teachers, parents, friends and careers staff. To help you make informed decisions, you should read the subject information in this guide very carefully. Ultimately though, *you* must make the final decision if your Sixth Form study is to be enjoyable and successful.

Which subjects go best together?

Your main considerations should be what you will enjoy studying in depth for two years and where your strengths lie. Some university courses and careers have specific requirements, for example Medicine, and you should be aware of these. You may wish to think about combinations of subjects carefully. This will give an impressive breadth to your programme of study and promote the development of a range of skills.

Further sources of advice:

- <https://www.ucas.com/explore/subjects> - gives information on different degree courses and their entry requirements
- <https://www.theuniguide.co.uk/advice/a-level-choices/six-things-you-need-to-know-before-making-your-a-level-choices> - useful “do’s” and “don’ts” when choosing A Levels
- <https://www.informedchoices.ac.uk/> - a helpful tool from the Russell Group to help ensure A Level choices are well-informed

As a student in the Herschel Consortium, you will not take AS Levels at the end of Year 12: instead you will sit internal exams to help assess progress and help you prepare for the linear A Level exams taken at the end of Year 13.

All these issues will be explored at an individual “post-16 discussion” if circumstances allow for face-to-face meetings.

General Entry Requirements

You are expected to have the intention and willingness to study hard in school. The most successful learners spend about 30 hours per week on independent study at school and at home. In addition, you will need to achieve the following:

Minimum Entry Qualifications for enrolment into the Consortium

1. At least five GCSE passes at Grades 9-5
2. At least Grade 5 in Mathematics to be based at Herschel, or at least Grade 4 to be based at Baylis.
3. At least Grade 5 in English Language or English Literature
4. All A Level courses have additional subject-specific entry requirements – see individual course descriptions for more precise information
5. **At Herschel Grammar School only**, a GCSE total point score of at least 45 points in your best 8 subjects (which must include English and Mathematics). For example:

[Grade 8 English Language](#), [Grade 5 English Literature](#), [Grade 6 Mathematics](#), [Grade 6 Biology](#), [Grade 9 Chemistry](#), [Grade 7 Physics](#), [Grade 8 History](#), [Grade 9 French](#), Grade 4 Business, [Grade 6 Physical Education](#)

would give a **total of 59 POINTS**, based on the “[Best 8 subjects](#)”.

- To enrol on a *four* A Level programme at Herschel Grammar School, a GCSE total point score of at least 56 is required (across your 8 best subjects).

Choosing Subjects across the Consortium

- In Year 12 most students will study **three** A Level subjects, though a few with the strongest GCSE profile will study four.
- Partnership between Baylis Court School and Herschel Grammar School allows you a wider range of subjects from which to choose.
- The school where you do the majority of your subjects will be your “Base School”. For the small minority of students who cross-site, a maximum of ONE subject can be chosen from your non-base school.

NB: Only female students can be based at Baylis, but male and female students can access courses there.

- A final decision on whether a subject will run is dependent on there being viable numbers in that subject

Subjects taught at Baylis

(see pages 7-13)

A Level Subject	Minimum entry requirement at GCSE
Biology	Grade 6 in Biology or in both grades of Combined Science, plus Grade 5 in English Language and Maths
Chemistry	Grade 6 in Chemistry or in both grades of Combined Science, plus Grade 5 in English Language and Maths
English Language & Literature	Grade 6 in both English Language and Literature
Government & Politics	Grade 6 in English Language or Literature
History	Grade 6 in History, or Grade 6 in both English Language and Literature
Law	Grade 5 in both English Language and Literature
Mathematics	Grade 6 in Maths
Media Studies	General entry requirements
Psychology	Grade 5 in English Language and Maths
Religious Studies	Grade 5 in English Language plus Grade 6 in RS if taken
Sociology	Grade 5 in both English Language and Literature
Extended Project Qualification (EPQ)*	General entry requirements plus the ability to work independently on a project and meet deadlines

* Herschel-based students will have the opportunity to take the Extended Project Qualification at Herschel in Year 12 alongside their A Levels so should not choose this as a Year 12 option.

Subjects taught at Herschel

(see pages 14-24)

A Level Subject	Minimum entry requirement at GCSE
Biology	Grade 7 in Biology or in both grades of Combined Science, and Grade 6 in Maths
Business	Grade 6 in Maths and English Language or Literature, plus Grade 6 in Business Studies or Economics if taken
Chemistry	Grade 7 in Chemistry or in both grades of Combined Science; Grade 6 in Maths is desirable
Computer Science	Grade 7 in Maths, plus Grade 7 in Computer Science if taken
D&T: Product Design	Grade 6 in GCSE Design & Technology. An example of previous design work may be requested
Economics	Grade 6 in Maths and English Language or Literature (though Grade 7s are preferable), plus Grade 6 in Business Studies or Economics if taken
English Literature	Grade 6 in both English Language and Literature
Geography	Grade 6 in Geography (NB. Requirement for residential fieldwork)
Government & Politics	Grade 6 in English Language or Literature, and Grade 6 in a humanities subject (Geography, History or RS)
History	Grade 6 in History if taken. Strong candidates who have not studied GCSE History may be considered
Mathematics	Grade 7 in Maths (Higher Tier)
Further Maths	Grade 8 in Maths (Higher Tier). Also see below
PE	Grade 6 in PE or Biology or both grades of Combined Science.
Physics	Grade 7 in Physics or in both grades of Combined Science, and at least Grade 7 in Maths. Studying A Level Maths is also highly recommended
Psychology	Grade 6 in Maths and English Language or Literature, and Grade 6 in Biology
Spanish	Grade 6 in Spanish (though Grade 7 is preferable)

- Business and Economics are NOT permitted as a subject combination
- Further Maths will in general need to be a **fourth subject** and you will also need to choose Maths at Herschel.

Enrichment Block (*only available to Herschel-based students*):

Core Maths	Grade 6 in Maths (Higher Tier)
Extended Project Qualification (EPQ)	Grade 6 in English Language plus the ability to work independently on a project and meet deadlines

Students based at Herschel benefit from participation in the **Year 12 Enrichment Block** alongside their A Level studies. This involves a weekly Wellbeing lesson (that includes sport) as well as the option to study Level 3 Core Maths or the Extended Project Qualification – see information in the subject profiles. This programme helps you cope with the wider demands of Sixth Form study and prepares you for life at university and beyond.

How do I apply?

To apply to be based at Baylis Court School:

INTERNAL APPLICANTS currently at Baylis should print off an application form from the school website and return it to Ms Kasmani, via the School Office.

EXTERNAL APPLICANTS who wish to be based at Baylis should print off the application and reference forms from the Baylis website. Please ensure both forms are completed as directed, and either email them to Ms Kasmani on nka@bayliscourt.slough.sch.uk or post to Sixth Form Admissions c/o Ms N Kasmani, Baylis Court School, Gloucester Avenue, Slough, Berkshire SL1 3AH.

To apply to be based at Herschel Grammar School:

ALL APPLICANTS (whether internal or external) who wish to be based at Herschel should apply online via the link on the Herschel Grammar School website – available from mid-December.

**All applications must be received by
Monday 1 February
2021**

What do I do now?

1. Look through this booklet to become familiar with the subjects that you are interested in.
2. Check your predicted grades to see if the subjects you wish to do are suitable. Talk with your subject teachers about this.

For students currently at Baylis Court and Herschel Grammar Schools:

By the closing date of 1 February 2021:

3.
 - If applying to be based at Baylis: download and complete your application form and hand it to the school office.
 - If applying to be based at Herschel – apply online **after** you have received your mock results.
4. Discuss your subject interests in your individual post-16 discussion in the Spring Term.
5. If your application is successful, you will receive a letter offering you a conditional place and inviting you to an Induction Day that we hope to run in early July.
6. Enrolment will be based on exam results (or if arrangements change, the alternative model of assessment put in place by Ofqual). If you don't achieve the grades you require, don't panic! On GCSE Results Day we will discuss what choices you have.

If you wish to be considered for enrolment at both Baylis and Herschel, you should complete an application for both schools.

For students applying from all other schools:

By the closing date of 1 February 2021:

3.
 - Applicants for Baylis – download and complete the application form and school reference from the Baylis website and send them to Baylis, either by email to Ms Kasmani on nka@bayliscourt.slough.sch.uk or by post to Sixth Form Admissions, c/o Ms N Kasmani, Baylis Court School, Gloucester Avenue, Slough SL1 3AH.
 - Applicants for Herschel – apply online, preferably **after** you have received your mock results if time permits.
4. Following receipt of your application and reference, you may be invited for a post-16 discussion but given the current restrictions, it is more likely that we will be in contact with you via email.
5. If your application is successful, you will receive a letter offering you a conditional place and inviting you to an Induction Day that we hope to run in early July.
6. Enrolment will be based on exam results (or if arrangements change, the alternative model of assessment put in place by Ofqual). If you don't achieve the grades you require, don't panic! On GCSE Results Day we will discuss what choices you have.

**Remember: ALL APPLICATIONS MUST BE RECEIVED
BY MONDAY 1 February 2021**

BIOLOGY at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Biology or in **both** grades of Combined Science, **plus** at least Grade 5 in English Language **and** Maths.

Exam board: AQA

Description of subject:

Biology is the study of life and living organisms. The course emphasises the way in which biologists work and the contributions of biology to society. The course provides lots of opportunity for practical work and establishes contexts for How Science Works. Classes take place in spacious, well equipped laboratories, and involve practical sessions, field work and visits to places of scientific interest. Biology staff provide regular drop in support sessions throughout the year and ICT is used to support teaching.

Assessment at the end of Year 13:

Paper 1 (Any content topics 1 to 4 and relevant practical skills).

Written Exam: 2 hours (91 marks made up of 76 short and long answer questions and 15 extended response questions)

Paper 2 (Any content topics 5 to 8 and relevant practical skills).

Written Exam: 2 hours (91 marks made up of 76 short and long answer questions and 15 comprehension questions)

Paper 3 (All content and practical skills)

Written Exam: 2 hours (90 marks made up of 38 structured questions, including practical techniques, 15 marks from critical analysis of given experimental data and 25 marks essay from a choice of two titles).

Student comments:

"Biology is a subject that allows you to deeply explore a wide range of interesting topics, whilst challenging you to analytically carry out practical work equipping you for life after school."

CHEMISTRY at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Chemistry or in both grades of Combined Science, **plus** at least Grade 5 in English Language **and** Maths.

Exam board: AQA

Description of subject:

Chemistry is a fascinating subject that covers every aspect of our day to day lives. It provides many opportunities for you to show your practical skills, and requires both manipulative and analytical skills. It is a rewarding subject to study and leads into many degree courses and careers. Some examples of university courses are Chemistry, Medicine, Pharmacy, Forensic Science, Engineering and Environmental Science. Other science degree courses will also benefit from an A Level Chemistry background. There are a wide range of techniques to learn, from titrations and making solutions, to researching the latest technologies and considering modern drug developments. This AQA Chemistry course will provide challenge, a practical approach, and relevance to everyday living.

Assessment at the end of Year 13:

Paper 1 (Relevant physical chemistry topics, inorganic chemistry and relevant practical skills).

Written Exam: 2 hours (105 marks made up of short and long answer questions)

Paper 2 (Relevant physical chemistry topics, organic chemistry and relevant practical skills).

Written Exam: 2 hours (105 marks made up of short and long answer questions)

Paper 3 (all content and practical skills)

Written Exam: 2 hours (90 marks made up of 40 questions on practical; techniques and data analysis, 20 marks on testing across the specification and 30 marks of multiple choice questions)

Student comments:

"This subject is truly unique as it is rooted in today's culture, and I love the combination of theoretical and practical work."

ENGLISH LANGUAGE & LITERATURE at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in **both** English Language **and** English Literature.

Exam board: Edexcel

General description of the subject:

The course will provide a strong continuity with GCSE English Language and GCSE English Literature. If you enjoy analysing and changing language for a range of contexts then this course is for you. You will also need to have a passion for the study of literature.

What you can expect from the subject content:

Methods of language analysis will underpin each aspect of the course. You will be assessed through a combination of coursework and exam work. There will be two exam papers each of which is 2.5 hours long.

You will be asked to recreate a text into your own creative response, write a piece of creative non-fiction and offer a commentary on your choices.

Student comments:

"A Level English Language & Literature has helped me to improve my literacy skills even in different subjects."

"This is such a creative subject!"

"We do not sit an AS exam but our teachers assess us throughout the course. This means that we always know how we are doing."

Student comments for Government & Politics:

"Government and Politics is such an interesting subject to choose because you can discover the workings of the government and the different aspects of law in the UK. It allows you to apply what you learn to real life and to debate different issues – which is great if you are an opinionated person like me!"

"You learn so much in so little time. Politics opens your eyes to more than just what the media shows us."

"It is a subject that is directly applicable to real life. The elections topic in particular will be so relevant when you turn 18. It's also a subject which has lots of debates within!"

GOVERNMENT & POLITICS at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in English Language or Literature. If you have a lively and enquiring mind, and a desire to explore new ideas, this is the option for you.

Exam board: Edexcel

Description of subject:

There has never been a better time to study politics! Recent events such as the EU referendum, Scottish referendum and changes in both the Conservative and Labour parties have given us a lot to study! Over the last few years, our politics students have witnessed the resignations of key political figures, a complete overhaul of the way the country is governed, political scandals and intrigue – and that's just a taster! Politics affects us in so many ways and this course is your chance to find out how it all works. You will study political participation, issues of democracy and the phenomenon of voting behaviour, as well as learning about how the UK political system works. You will be able to visit the Houses of Parliament, meet the local MP and much more! You will also study electoral systems around the world, how governments work, and the influence the media has on politics. The UK political parties and their changing makeup and policies will also be investigated, as well as a brief exploration of how the EU affects us all.

You will also study ideologies such as socialism, liberalism and conservatism, how they have developed and how they affect us today. There will also be an option to study feminism, ecologism or anarchism. If you have an interest in big ideas and philosophy, you'll really enjoy this! Finally we will examine issues surrounding global politics, including key areas such as globalisation, nationalism and the global balance of power, ever relevant in our changing society.

You will be expected to read widely and write essays of course, but more important is your willingness to debate ideas with others, and have opinions of your own. A love of current affairs and debating is essential.

Politics is an excellent qualification for those of you thinking of a career in Law, the Media and of course Government itself.

Over the two years you will study:

Component 1: Political participation and ideologies (socialism /liberalism and conservatism)

Component 2: UK government and feminism/anarchism/ecologism

Component 3: Global politics

HISTORY at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in History, or Grade 6 in **both** English Language and Literature.

“Those who don’t know History are destined to repeat it” – Edmund Burke

Exam board: AQA

Why take History at Baylis?

A Level History lessons are engaging and stimulating, which makes them both challenging and great fun! At Baylis, you will be treated like Historians. In lessons, you will be given the chance to develop your analytical and evaluative skills to help form arguments and points of view which are both complex and convincing. It is because of these unique and sought after skills which makes History a highly regarded subject amongst top universities and employers alike.

Description of subject:

You will have the opportunity to study three fascinating areas of History which will cover the History of both Britain and Europe.

You will study three very interesting areas of history, covering the following:

Component 1: Breadth Study - Stuart Britain and the Crisis of Monarchy, 1603-1702 (40% of A Level)

Component 2: Depth Study - Democracy and Nazism: Germany, 1918–1945 (40% of A Level)

Component 3: Coursework - The Development of Women’s Rights in Britain (20% of A Level)

Expectations:

You will be required to undertake deep analysis of sources and historical interpretations as well as taking responsibility for your own learning by conducting your own historical research. You will also be given the opportunity to present your findings to your peers in the form of class presentations to help develop your ability to speak publicly. You will also be required to learn how to structure academic style answers to historical questions for both exams and coursework which both form part of how you are examined.

Student comments:

“History allows me to see situations from an analytical, critical and argumentative point of view. I really feel like it has prepared me for study as the skills learned can be used in other subjects and areas.”

LAW at Baylis

Qualifications needed to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 5 in **both** English Language and Literature. This specification is particularly suitable if you wish to gain knowledge of, or further your pre-existing knowledge and understanding of, the English legal system and substantive law such as criminal law.

Exam board: OCR

Description of subject:

You will learn how UK law is created and administered. The study of Law is a challenging but rewarding option and enables you to learn how to analyse situations, and apply legal rules and principles to a scenario. You will also have the opportunity to examine, understand and explore your rights and responsibilities.

In Year 12:

You will study the English Legal System, and Sources of Law, including the organisation of the courts; the role of Judges and legal professionals; the training of and the routes to qualifying as a Solicitor and Barrister. You will gain knowledge and understanding of the penal system, the sentencing of adult offenders and the pros and cons of our jury system.

In Year 13:

You will be expected to demonstrate a greater depth of study of criminal law, including murder, theft, assault, insanity, and intoxication. You will review cases, analyse and solve problems by applying legal rules.

The course aims to encourage you to develop:

- Knowledge, understanding and application of the law
- Researching skills
- Strong verbal and written communication skills

There are also opportunities to visit local magistrate and Crown courts, as well as the Royal Courts of Justice and the Houses of Parliament in London. There may also be a possible trip abroad to the European Court of Human Rights in Strasbourg, France. You will also have the opportunity to take part in a Law Conference Mock Trial in London.

A Level Law can be studied alongside almost any other subject as it is a versatile subject, and works particularly well with subjects that are analytical in nature such as English Language & Literature, Business, ICT and History. A Level Law will equip you with knowledge that ensures an easier transition to further study of Law or any other subject at undergraduate level; and the skills acquired during the course are transferable to a vast range of professions.

Student comments:

“This course has allowed me to learn about the laws enforced on us, and the consequences of breaking these laws.”

MATHEMATICS

at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need a Grade 6 in Maths.

Exam board: Edexcel

Description of subject:

A Level Mathematics involves developing skills in algebra, geometry, statistics and mechanics which are then applied to a wide variety of abstract and real-life situations.

In Year 12/AS Level:

At AS Level Mathematics you will study pure mathematics, statistics and mechanics. You will stretch your knowledge of number and algebra to learn topics such as calculus and series. You will learn to add up an infinite number of numbers and use integration to work out the area of shapes.

Assessment for AS Level Mathematics:

Paper 1: Pure Mathematics. 2 hours, 100 marks.

Paper 2: Statistics and Mechanics. 1 hour, 50 marks.

Section A: Statistics, 25 marks.

Section B: Mechanics, 25 marks.

Please note that there is no optional content, and there will be assessment of problem solving, proof and modelling, as well as pre-release of a large data set.

NB: The AS Level qualification will NOT count towards the A Level qualification.

In Year 13/A Level:

At A Level Mathematics you will develop your pure maths knowledge to understand proof, logarithms and vectors. You will learn new trigonometric functions and proofs and also learn to apply your knowledge of calculus to work out the volume of shapes.

Assessment for A Level Mathematics:

Paper 1: Pure Mathematics 1. 2 hours, 100 marks.

Paper 2: Pure Mathematics 2. 2 hours, 100 marks.

Paper 3: Statistics and Mechanics. 2 hours, 100 marks.

Section A: Statistics, 50 marks.

Section B: Mechanics, 50 marks.

AS and A Level Further Mathematics:

There may be an opportunity to study AS or A Level Further Mathematics along with A Level Mathematics if you have studied GCSE Mathematics and achieved at least a Grade 8.

In AS and A Level Further Mathematics you will study Further Pure Mathematics 1 and Further Pure Mathematics 2. You will also have the option to choose from Further Pure, Further Statistics, Further Mechanics or Decision Mathematics. All components will be equally weighted

Student comments:

"Maths opens up great opportunities for your future. It's an enjoyable and exciting subject that allows you to think in different ways. It's fantastic!"

MEDIA STUDIES

at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need to have the ability to work constructively as a member of a team.

Exam board: WJEC/Eduqas

Description of subject:

This exciting and popular linear academic subject allows learners to study a range of media forms in terms of a theoretical framework which consists of media language, representation, media industries and audiences. The following forms are studied in depth through applying all areas of the framework: newspapers, magazines, television, on line, social and participatory media. Advertising and marketing, film, music video, radio and video games are studied in relation to selected areas of the framework. Aspects of this framework are studied in the following way across the following three components.

Component 1: Media Products, Industries and Audiences -

Written examination: 2 hours 15 minutes (35% of qualification)

The examination assesses media language, representation, media industries, audiences and media contexts. It consists of two sections:

Section A: Analysing Media Language and Representation (2 questions)

This section assesses media language and representation in relation to two of the following media forms: advertising, marketing, music video or newspapers.

Section B: Understanding Media Industries & Audiences

This section assesses two of the following media forms – advertising, marketing, film, newspapers, radio, video games - and media contexts.

Component 2: Media Forms and Products in Depth

Written examination: 2 hours 30 minutes (35% of qualification)

The examination assesses media language, representation, media industries, audiences and media contexts. It consists of three sections:

Section A – Television in the Global Age

There will be one two-part question or one extended response question.

Section B – Magazines: Mainstream and Alternative Media

There will be one two-part question or one extended response question.

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MEDIA STUDIES

at Baylis (cont'd):

Section C – Media in the Online Age

There will be one two-part question or one extended response question.

Component 3: Cross-Media Production

Non exam assessment (30% of qualification)

An **individual** cross-media production based on **two forms** in response to a **choice of briefs set by WJEC**, applying knowledge and understanding of the theoretical framework and digital convergence.

Student comments:

"This course has been so exciting. I have learnt how to be analytical and evaluative, and I can now look beyond the surface and understand the wider meanings behind every media text."

"I have really enjoyed the excellent mix of theoretical study of media with practical work as they both complement each other."

PSYCHOLOGY

at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 5 in English Language **and** Maths. Psychology is a subject which requires the ability to express yourself accurately and fluently on paper as well as work with statistics and data interpretation and presentation.

Exam board: AQA

Description of subject:

Psychology can best be described as the science of human mind and behaviour, and psychologists carry out experiments relating to a number of everyday experiences:

- Why do people obey?
- What happens when we get scared and can we stop it happening?
- Are we all abnormal or does it depend upon the time and place?
- Does your childhood attachment determine your future?

If you can write accurately and fluently; think logically and make judgments on what you see; listen to and work well with other students, then you should do well in Psychology.

Psychology gives you a good grounding in the skills of writing and arguing which you will need at university, and insights into a range of areas that could prove useful to you in the future.

In Year 12 you will study:

Unit 1: Social Influence, Memory, Attachment

Unit 2: Approaches in Psychology, Psychopathology (mental illness) and Research Methods

In Year 13 you will study:

Unit 1: Issues and debates in Psychology, Approaches in Psychology, and Biopsychology

Unit 2: Schizophrenia, Aggression, Cognition and Development, and Research Methods

Student comments:

"This course has really allowed me to see the world from many different perspectives. It has been one of the most exciting learning experiences I've ever had."

RELIGIOUS STUDIES

at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 5 in English Language and at least a Grade 6 in Religious Studies if taken. You do not have to be religious to succeed in Religious Studies, and therefore this course is available to people of any religious belief, or none.

Exam board: OCR

Description of subject:

Religious Studies gives you the opportunity to study some of the fundamental questions which people have always asked about life, such as: does God exist, what happens to us when we die, and how should we behave?

In **Philosophy of Religion** you will study philosophical issues and questions raised by religion and belief. These include arguments regarding the existence or non-existence of God, the nature and influence of religious experience and the problems of evil and suffering. You will also explore philosophical language and thought, through significant concepts and the works of key thinkers, illustrated in issues or debates in the philosophy of religion.

Religion and Ethics is characterised by the study of ethical language and thought, with exploration of key concepts and the works of influential thinkers. Ethical theory will also be applied to issues of importance; namely euthanasia, business ethics, and sexual ethics.

Developments in Religious Thought provides an opportunity for the systematic study of one religious tradition. This will include the exploration of religious beliefs, values, teachings and practices that shape religious identity, as well as sources of wisdom and authority. Also central are the ways in which religious traditions have developed over time, and religious responses to challenges and significant contemporary social issues.

This qualification is designed to develop a greater understanding and appreciation of religious beliefs and teachings, as well as the disciplines of ethics and philosophy of religion. You will develop your skills of critical analysis in order to construct balanced, informed arguments and responses to religious, philosophical and ethical ideas.

What next?

Religious Studies is a well-respected academic subject which can lead to many degree courses and almost any career, such as Law, Medicine, Journalism and the media, and in fact any career where you are dealing directly with people.

... cont/

RELIGIOUS STUDIES

at Baylis (cont'd):

As with any subject in the area of Humanities, you will acquire a great range of skills, such as analysis, interpretation, critical thinking and the ability to produce extended evaluative pieces of writing.

These are skills that will prepare you well for a range of courses in higher education and, beyond that, in employment generally.

Over the two year course you will study:

Component 1: Philosophy of Religion

Component 2: Religion and Ethics

Component 3: Developments in religious thought

Student comments:

"Religious Studies is a really rewarding subject to study; it's a lot of work, but is insightful learning about key influential thinkers and their ideas. This fascinating subject gives you the opportunity to open your mind and allows you to explore philosophical questions and analyse the views of others."

SOCIOLOGY

at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 5 in **both** English Language and Literature.

Exam board: OCR

Description of subject:

Sociology invites us to challenge and question our common sense assumptions about society and develop a sociological imagination. Students will be able to gain a deeper understanding of the world around them and reflect on social issues that are often relevant to their own social experiences. This course offers students the opportunity to acquire knowledge and a critical understanding of contemporary social processes and social changes. Developing strong critical thinking skills and being able to consider issues with a global outlook, will be of huge benefit to students moving forward, whether in further education, the workplace or society in general.

In Year 12 you will study:

- Introducing socialisation, culture and identity
- Families and relationships
- Research methods and researching social inequalities

In Year 13 you will study:

- Globalisation and the digital social world
- Debates explored through a detailed study of crime and deviance

How is the course assessed?

You will be examined at the end of Year 13 in three written examinations.

Student comments:

"Sociology has given me a new perspective of the world and a deeper understanding of those around me."

"Sociology relates to our daily lives and educates us about other groups and communities around the world."

EXTENDED PROJECT

QUALIFICATION at Baylis

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need the ability to work independently on a project, manage your time effectively and meet deadlines.

Description of subject:

The Extended Project Qualification is a one year course that provides you with the opportunity to explore an idea or hobby that really interests you. It is equivalent to an AS Level and will teach you skills that are valued by employers and universities. This course is for you if you are self-motivated and enjoy working independently – whether in a practical way, like designing or performing, or researching, investigating and writing.

There are four types of Project to choose from:

- Write a dissertation
- Produce an artefact such as a sculpture, model or DVD
- Develop and showcase a performance (sport, drama or music)
- Conduct an investigation/field study

Once you have decided, you will be given guidance to help develop the skills you need to manage your Project. Whatever you chose, you will be expected to work independently, supported by your teachers. You could learn more about something that interests you: or investigate a controversial topic; expand your knowledge of one of your other subjects; or gain practical skills that will help you in Higher Education and the workplace.

How is the course assessed?

You will be assessed on:

- How well you manage your work, such as planning your time and choosing what methods to use
- How you select and use information and resources throughout the Project
- The range of skills you develop and use
- How effectively you review your own work

At the end of the course, you will achieve an A* to E Grade, equivalent to an AS Level. An A* Grade is currently worth 28 UCAS points.

Student comments:

"I'm very glad I took the EPQ as it gave me the chance to find my own work ethic as well as learn coursework and research skills that I will need for university."

BIOLOGY at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 7 in Biology or in **both** grades of Combined Science, **and** at least a Grade 6 in Maths. If you have a deep curiosity about the world in which we live and want to know more, Biology can be rewarding.

Exam board: OCR

Description of subject:

This is a dynamic and exciting subject to study at A Level. Success can lead to a plethora of options at university - courses like Biology, Medicine, Dentistry, Pharmacy and other scientific fields as well as being recognised as developing forensic thinking for courses such as Law and Economics. Lessons comprise a mixture of theory and experimental work. You will gain an understanding of the biological world, yourself and key problems facing the world such as global warming.

Over the two year course you will study:

Module 1: Development of practical skills in Biology
Module 2: Foundations in Biology
Module 3: Exchange and Transport
Module 4: Biodiversity, evolution and disease
Module 5: Communication, homeostasis and energy
Module 6: Genetics and ecosystems

Assessment at the end of Year 13:

This is split into three written papers and a non-examined practical component.

Student comments:

"A well-organised and resourced course. Lessons are always fun and fast-paced, and the teachers are approachable."

BUSINESS at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Maths **and** English Language or Literature. You do not need to have studied Business Studies or Economics at GCSE, but if you have, we would expect at least a Grade 6. It is also highly important that you have an interest in the world around you.

Exam board: Edexcel

Description of subject:

A Level Business helps to develop a theoretical and practical understanding of the business world. You will learn how to generate enterprising and creative approaches to business opportunities, problems and issues, helping you to acquire a range of relevant business and generic skills, including decision making, problem-solving, the challenging of assumptions and critical analysis, as well as applying numerical skills in a range of business contexts. The teachers have many years of practical business experience which is used to help bring the subject to life. This is a topical subject that achieves strong results and a high level of student retention.

In Year 12:

You will be introduced to business through **Theme 1: Marketing and People**, and **Theme 2: Managing Business Activities**. You will begin building knowledge of core business concepts and applying them to business contexts to develop a broad understanding of how businesses work.

In Year 13:

You will extend your breadth and depth of knowledge and understanding through **Theme 3: Business Decisions and Strategy**, and **Theme 4: Global Business**, which requires you to take a more strategic and evaluative view of business opportunities and issues around our world.

Assessment takes the form of three specific written exams at the end of Year 13 which examine the components studied in both Years 12 and 13:

Paper 1 (35% of A Level): Marketing, People and Global Businesses (2 hours, 2 questions)

Paper 2 (35% of A Level): Business activities, Decisions and Strategy (2 hours, 2 questions)

Paper 3 (30% of A Level): Investigating Business in a Competitive Environment (2 hours, 2 questions)

Each question is set in a context, drawing on topics from across Themes 1 and 4 for Paper 1 and Themes 2 and 3 for Paper 2, and all four themes in Paper 3. Sections A and B both comprise of one data response question, broken down into a number of parts, with one extended open-response question at the end.

CHEMISTRY at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 7 in Chemistry or in **both** grades of Combined Science; a Grade 6 or above in Maths is also desirable.

Exam board: OCR Chemistry A

Description of subject:

This subject is a must for courses like Medicine, Dentistry, Pharmacy and many other challenging degrees in science at university. Lessons comprise a mixture of theory and experimental work. You will gain an understanding of all three key branches of chemistry - physical, organic and inorganic. An ability to write balanced symbol equations and carry out numerical calculations is a key component of A Level studies.

Over the two year course you will study six modules:

- Foundations in Chemistry
- Periodic Table and Energy
- Core Organic Chemistry
- Development of practical skills
- Physical Chemistry and Transition elements
- Organic Chemistry and Analysis

Assessment at the end of Year 13:

This is split into three written papers and a non-examined practical component.

Student comments for Chemistry:

"I've gained an understanding of how Chemistry can be applied to real world situations."

"A challenging subject so it's very important to work hard from day one if you want to understand it!"

Student comments on Computer Science:

"It makes you think outside the box."

"There's a lot to learn!"

"The specification is challenging, but if you have an interest in the subject, you'll succeed."

COMPUTER SCIENCE at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 7 in Maths and at least a Grade 7 in Computer Science if taken. You will also need a keen interest in technology, programming, mathematics and computers, and it is strongly recommended that you take A Level Maths alongside this qualification if you are thinking of a career in computer science.

Exam board: OCR

Description of subject:

In A Level Computer Science you will learn the skills to enable you to choose and control what your computer does for you. You will be able to solve problems and carry out investigations in aspects of computer science that interest you.

In Year 12:

You will learn about the theory of computation and the fundamentals of computer systems, including computer organisation and architecture. You will learn about communication, networking and the consequences of the use of computers. You will acquire the necessary skills to write computer programs, including how to design algorithms to solve a range of interesting and increasingly complex problems. You will also learn how to program using object orientated techniques, structure programs for maximum efficiency, and test the program.

In Year 13:

You will continue to develop the knowledge and skills acquired in Year 12, as well as learn about databases, big data and functional programming. You will also complete a practical project on a topic you find interesting.

Some examples of the types of problem to solve or investigate are:

- a computer game
- an application of artificial intelligence
- a control system, operated using a device such as an Arduino board
- a website with dynamic content, driven by a database back-end
- an app for a mobile phone or tablet
- an investigation into an area of computing, such as rendering a three-dimensional world on screen

Throughout the course, you must be prepared to practise your programming regularly outside of lessons.

Assessment at the end of Year 13:

Coursework:	20%
Paper 1:	40%
Paper 2:	40%

D&T: PRODUCT DESIGN at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in GCSE Design & Technology. An example of previous design work may be requested, along with a teacher recommendation.

Exam board: AQA

Description of subject:

This subject considers the processes of designing, manufacturing and using a range of familiar products. Why are products designed? How are they made? What materials and processes are involved, and how are they used? Moral, cultural and environmental factors arising from making and using products are also considered. By choosing this subject, you will:

- Extend your understanding of Design & Technology with a focus on product design, user-centred design and engineering.
- Carry out extensive research and gather information from a range of primary and secondary sources.
- Test a range of materials and match working properties to applications.
- Investigate design opportunities using industry-standard 3D Computer Aided Design programmes.
- Study modern manufacturing processes and use computer numerically controlled machines to produce design solutions.
- Extend and apply your knowledge of designing and making to achieve industry quality outcomes.
- Develop a greater awareness of the responsibilities that designers have to engineer sustainable products.
- Generate a Portfolio which involves completing a number of design & engineering assignments that could lead to developing links with industry and drawing upon the experience of professional designers, engineers and manufacturers.

Over the two year course:

You will study core technical principles through a range of design projects and engineering assignments. Design and manufacturing principles are introduced through manufacturing and prototyping tasks, along with 3D CAD modelling.

Assessment at the end of Year 13:

The theory will be examined in one exam and accounts for 50% of the overall qualification, as does the coursework component.

... cont/

D&T: PRODUCT DESIGN at Herschel (cont'd):

Future Pathways

A Level Product Design allows you to generate skills and understanding within engineering, industrial design, manufacturing, marketing, architecture, interior design, web design, project management and certain medical industries. It would complement a variety of other A Level choices, particularly Maths and Physics.

Student comments for D&T: Product Design:

"This course has allowed us as students to have full creative freedom to develop our skills and knowledge on design."

"The course was a very fun and productive one, filled with experimentation and hands-on practical development."

ECONOMICS at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Maths **and** English Language or Literature, though Grade 7s are preferable given the demands of the course. You do not need to have studied Business or Economics at GCSE, but if you have, we would expect at least a Grade 6. You must also have a healthy interest in current affairs and in how the world works. You will be expected to keep this knowledge up-to-date, and be able to apply news events to the theories being taught.

Exam board: Edexcel

Description of subject:

A Level Economics helps you develop a theoretical and practical understanding of the role of economics in our world. Economists study microeconomics (the economics of individual markets) and macroeconomics (the economics of whole economies). Being heavily related to current affairs, which are forever evolving and revolving, Economics is a subject that will interest those with a natural curiosity for understanding more about, and continually questioning what is happening in, the world in which we live. The teachers have many years of practical experience which is used to help bring the subject to life. This is a topical subject that achieves strong results.

Year 12 introduces you to microeconomics through **Theme 1: Introduction to markets and market failure**, and macroeconomics through **Theme 2: The UK economy – performance and policies**. You will begin building knowledge of the theoretical underpinnings of the subject, and contextually apply this to real- world scenarios to develop a broad understanding of how the economy works.

Year 13 furthers your breadth and depth of knowledge and understanding of micro and macroeconomics through **Theme 3: Business behaviour and the labour market**, and **Theme 4: A global perspective**, which requires you to take a more strategic, globalised and evaluative view of the economics world around you.

Assessment takes the form of three **specific** A Level written exams at the end of Year 13 which examine the components studied in both Years 12 and 13:

Paper 1 (35% of A Level): Markets and business behaviour (2 hours, examining Themes 1 and 3).

Paper 2 (35% of A Level): The national and global economy (2 hours, examining Themes 2 and 4)

The format of both exams are three sections: A - multiple-choice and short-answer questions; B - one data response question; and C - an extended open response question (choice of one from two).

Paper 3 (30% of A Level): Microeconomics and macroeconomics (2 hours, with questions drawn from all four themes). Two data response questions broken down into a number of parts, each including one extended open-response question (choice of one from two).

ENGLISH LITERATURE at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in **both** English Language and English Literature. If you have enjoyed studying the set novels, plays and poetry at GCSE, then A Level English Literature may be for you.

Exam board: OCR

Description of subject:

Over the centuries, the most accurate measure of the country's changing views, obsessions and philosophies can be seen in the texts written by its citizens.

You will be expected to read widely, including literary criticism, and write essays of course. Most importantly, you will need to participate in discussion to formulate your own educated and persuasive viewpoint as to the best way to interpret the texts studied.

If you have an enthusiasm for language and a love of reading, then this might be the course for you. We offer a team of highly experienced A Level teachers, who will share with you their passion for Literature whilst helping you to develop and express your own views effectively.

In Year 12 you will study:

- Shakespeare's 'Hamlet', followed by Chaucer's 'The Merchant's Tale'.
An opportunity to explore two literary works which are regarded as 'foundation stones' for English Literature generally; the former play famously examines the question 'To Be Or Not To Be', while the latter poem is an 'earthy' satire on marriage and romance. Assessment is a closed text exam.
- F Scott Fitzgerald's 'The Great Gatsby', followed by Tennessee William's 'A Streetcar Named Desire'.
A chance to analyse a famous modern American classic novel, recently subject to yet another cinematic interpretation and a modern play that investigates what it is to be motivated by physical passion alone. Assessment is a closed text exam.

In Year 13 you will prepare for the components below which draw on both years' work:

Component 1: Oliver Goldsmith's 'She Stoops to Conquer' followed by revision of 'Hamlet' and of 'The Merchant's Tale' (Exam 40%).
Goldsmith's play is a light-hearted 18th Century comedy of manners which is still performed today. Assessment is a closed text exam.

Component 2: Edith Wharton's 'Age of Innocence' followed by revision of 'The Great Gatsby' (Exam 40%).
Wharton's novel, another modern American classic, concerns itself with America's failure to fulfil its own possibilities. Assessment is a closed text exam.

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ENGLISH LITERATURE at Herschel (cont'd):

Component 3: Coursework, to be started in Year 12 and completed in Year 13 (20%).

This internally assessed, externally moderated component consists of:

- close analysis or re-creative writing based upon 'A Streetcar Named Desire' and
- an essay comparing a selection of Wilfred Owen's War Poetry with E L Doctorow's novel 'The March' – the former, war's most famous poet; the latter, prize winning historical fiction on Sherman's march in the American Civil War.

Student comments:

"English is my favourite subject. I enjoy the lessons and I have great support from all of the teachers in the department."

"English is based around discussion which leads to lots of interesting conversations and shared views which I really enjoy."

GEOGRAPHY at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Geography.

Exam board: Edexcel

Course components: Paper 1:

Tectonics and hazards, coastal landscape, water insecurity, energy security.

Assessment: written exam (30% of A Level)

Paper 2:

Globalisation, regenerating places, superpowers, global development.

Assessment: written exam (30% of A Level)

Paper 3:

Synoptic investigation of a geographical issue.

Assessment: written exam (20% of A Level)

Coursework:

Independent investigation.

Investigate your own geographical title

Assessment: written report of 3000 words (20% of A Level)

Note: Undertaking residential field work is a requirement for this course.

Future careers for Geographers include Information Technology, Management, Financial Sector, Marketing, Global Information Systems, Travel Consultant, Government Statistician, Banking and Business Management, Town & Transport Planning, and Environmental Consultant.

Student comments:

"Geography helps me make sense of everyday news items."

"This is a subject I would recommend for the fieldwork alone!"

"Our week in Devon was great!"

"It was interesting to see the London Olympic site and all the development in Stratford."

GOVERNMENT & POLITICS at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in English Language or Literature, **and** Grade 6 in a Humanities subject (eg. History, Geography or RS). If you have a lively and enquiring mind, and a desire to explore new ideas, this is the option for you.

Exam board: AQA

Description of subject:

The course involves investigating the political institutions of Britain, key political ideologies and notable political thinkers. You will study American and British politics and major international events, look at the Houses of Parliament, elections and electoral systems, and the laws that rule us: all will be examined in depth. If you enjoy reading about controversial issues such as law and order, race relations, ideologies such as Fascism and Socialism, pressure groups such as Black Lives Matter, New Labour, the controversies relating to the war on terror and civil liberties, and the new era of post-Brexit politics, this A Level should be one of your choices. You will be expected to read widely and write essays of course, but more important is your willingness to debate ideas with others, and have opinions of your own. A love of current affairs, news websites and debating is essential.

Government & Politics is an excellent qualification for those of you thinking of a career in Law, the Media and of course Government itself. We visit the Houses of Parliament, attend study seminars in London and meet the politicians themselves. You will be taught by experienced teachers who are AQA examiners and moderators. Government & Politics has excellent pass rates and students achieve the highest grades.

Course components: You will take three exams comprising a range of short and long answer questions:

Component 1: UK Politics

Component 2: Ideologies

Component 3: Comparative British and American politics

Student comments:

"Politics has laid the foundation for my future career in News Media."

"We loved running Herschel's Mock elections – it seemed to inspire the whole school!"

HISTORY at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in History if taken. Strong candidates who have not studied GCSE History may be considered for the course.

Exam board: AQA

Description of subject:

History is interesting because it is about people, why they acted in a certain way and what the consequences of those actions were. History is a challenging and widely respected subject and studying History at A Level will enable you to develop both your analytical and your communication skills.

We use a range of classroom activities, including group presentations and essay writing. You will also be required to do some background reading to consolidate and develop your knowledge.

So, if you wish to become an individual who has an enquiring mind and is able to form your opinions rather than believe everything you see and hear, then A Level History is for you!

Course Components:

Component 1: Breadth Study – Germany 1871-1991

A chance to explore Germany's development from its unification in the 19th century to its re-unification at the end of the Cold War.

Assessment: Exam - analysis and interpretations (40% of A Level)

Component 2: Depth Study – Britain 1951-2007

This component allows you to explore Britain as it deals with changes within British society through to it finding its new place in the world after the Second World War.

Assessment: Exam - analysis and use of contemporary sources (40% of A Level)

Component 3: Historical Investigation

A personal study allowing you to develop and demonstrate your historical and research skills. The topic for this will be decided upon by AQA each year.

Assessment: Extended Essay – 3000 words (20% of the A Level)

Student comments:

"Lessons are enjoyable and feedback is always useful."

"History gives me a greater understanding of the world."

"I am always supported in my studies."

MATHEMATICS at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 7 in GCSE Maths (Higher Tier).

NB. A Level Mathematics is difficult and is meant to be difficult! If you have struggled to achieve a Grade 7 in GCSE Maths, we would strongly recommend that you consider Core Maths (see page 26).

Exam board: Edexcel

Description of subject:

A Level Mathematics involves developing skills in algebra, geometry, probability, mathematical physics (known as “Mechanics”) and statistics, which are then applied to a wide variety of abstract and real-life situations.

In Year 12 you will study:

- Pure Mathematics - in which you will extend and deepen your knowledge of algebra. You will also learn how to add up an infinitely long list of numbers and discover why baked bean tins are the shape that they are.
- Statistics - in which you will learn how to present and use data, to make predictions and calculate probabilities, as well as assessing whether or not the dice you are using are biased.
- Mechanics - in which amongst other things you will learn how to estimate the height of a building using a barometer.

In Year 13 you will study:

- Pure Mathematics - in which you will find that π crops up in all kinds of unexpected places not always connected to circles. You also get to meet another special number ‘e’ that occurs everywhere from atomic decay to high street banking.
- Statistics - in which you will start to learn the principles by which scientists decide whether a particular medical treatment works. You will also learn about the elusive “p-value” whose meaning usually stumps most undergraduates when writing their final-year dissertations in the sciences.
- Mechanics - in which you will learn to apply mathematics to a greater variety of real-world situations involving velocity, acceleration and forces.

Assessment at the end of Year 13:

2 x 2 hour papers on Pure Mathematics

1 x 2 hour paper on Statistics and Mechanics

Student comments:

“It’s challenging - and there’s a lot of algebra involved.”

“It’s amazing that when you get to A Level you can see how all the Maths fits together.”

FURTHER MATHEMATICS at Herschel

Please note that in general Further Mathematics can only be studied as a FOURTH subject.

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 8 in Maths (Higher Tier).

Exam board: OCR(MEI)

Description of subject:

For some students, a single A Level in Mathematics is not a sufficient challenge; similarly it is often a requirement (or at least a major advantage) to have Further Maths in order to study Mathematics, Engineering, Economics or the Physical Sciences at Oxford, Cambridge and some other top universities.

Over the 2 years you will study:

- Pure Mathematics topics such as: complex numbers; matrices and vectors; calculus; differential equations; hyperbolic functions and proof by induction.

You may also study:

- Further statistical topics including: linear; regressions; discrete and continuous random variables; hypotheses testing; correlation and chi-squared tests.
- Further topics in Mechanics such as: momentum and impulse; elastic strings and springs; work, power and energy; collisions and centre of mass.
- Further explorations of topics in Pure Mathematics such as: matrices; differential equations; calculus and series. You might also encounter topics such as number theory and group theory.
- You may also learn how to use technology to find solutions to advanced mathematical problems - the skills used in the Computational Fluid Dynamics of airflow over a Formula One car.

Student comments:

“If you’re good at maths, do Maths. If you’re really good at maths, do Further Maths!”

PHYSICAL EDUCATION at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need a Grade 6 or above in PE if taken. Those who have not taken GCSE PE can still study this A Level but Grade 6 in Biology or in **both** grades of Combined Science, is required. You should have a lively and enquiring mind, an interest in sports and a willingness to explore new ideas.

Exam board: AQA

Description of subject:

A Level PE is a combination of theory and practice. The ability to maximise performance is something that athletes are always seeking to do and in this course you will learn how that happens. From studying the practical application of scientific principles from Biology, Chemistry and Physics you will learn how elite performers use these to get the best out of themselves. You will also learn how performance is related to more than just physical attributes and training. By studying sports psychology you will find out how memory affects reaction time or how elite athletes combat nerves when performing in front of a live audience. You will gain insight into the way in which sport has evolved over generations and how sport today is influenced by everything from the ancient Greeks to modern technology.

PE is the preferred A Level if you wish to study Physiotherapy at university as well as sports science, SPECS and Occupational Therapy. It is also highly regarded for entry to the uniformed services and armed forces.

You will enjoy this course if you:

- participate regularly in a recognised sport or physical activity.
- are interested in finding out how the body works and responds to exercise.
- want to learn how to use scientific methods for improving performance.
- want to learn more about sports psychology.
- are interested in how society influences and is influenced by sport

In Year 12 you will study:

- Skill Acquisition
- Movement Analysis
- History of Sport
- Sports Psychology
- Applied Anatomy and Physiology

In Year 13 you will study:

- Exercise Physiology
- Biomechanics
- Sport Psychology
- Sport & Society
- Technology in Sport

... cont/

PHYSICAL EDUCATION at Herschel (cont'd):

Assessment at the end of Year 13:

Paper 1: 2 hour written exam (35% of A Level)

Paper 2: 2 hour written exam (35% of A Level)

NEA: School-based assessment:

Performance in the full context of one sporting activity (15%)

Written analysis and evaluation of weaknesses in performance (15%).

PHYSICS at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 7 in Physics or in **both** grades of Combined Science, **and** at least a Grade 7 in Maths. It is highly recommended that A Level Maths is taken as a complementary subject.

Exam board: OCR Physics A

Description of subject:

Where is dark matter? What is dark energy? Why can we only account for 4% of the universe? What does the LHC do now that it has discovered the Higgs boson? These are some of the big questions facing Physics today. Maybe you could help find the answers!

Physics is the truly universal science. It is the rational development of experiments, observations and theories to explain the fundamental structure of all we perceive, from the smallest subatomic particle to the entire Universe. Physics deals with fundamentals - the nature of space and time, matter and energy, simplicity and complexity. Physics underpins all sciences. Many major developments in chemistry, biology, geology and medicine have been made by physicists. Physics is also the foundation of much modern technology; mobile phones, flat screen televisions and the internet to name but a few!

In Year 12 you will study:

Quantities, Units, Scalars & Vectors
Forces, Work, Energy & Power
Materials, Momentum, Charge & Current
Energy, Power & Resistance
Electrical Circuits
Waves
Quantum Physics

In Year 13 you will study:

Thermal Physics
Circular Motion
Oscillations
Gravitational Fields
Astrophysics & Cosmology
Capacitors
Electric Fields
Magnetic Fields & Electromagnetism
Medical Imaging
Nuclear & Particle Physics

Assessment at the end of Year 13:

This is split into three written papers and a non-examined practical component.

Student comments

"Really interesting - and you'll learn so many cool concepts!"

"Studying Physics is like a roller-coaster: whatever happens, you'll have fun!"

"A difficult subject, but with hard work and dedication, a good grade is more than achievable."

PSYCHOLOGY at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Maths **and** English Language or Literature, **and** at least a Grade 6 in Biology, as Psychology is a subject which requires the ability to express yourself accurately and fluently on paper and to understand numbers and physiology at a basic level. Confidence in Maths and Biology is essential to succeed on the course.

Exam board: AQA

Description of subject:

Psychology is the scientific study of the mind and behaviour, and AQA Psychology (New Specification) introduces you to the broad range of Psychology topics.

This course of study comprises written units with no coursework. The emphasis is on applying knowledge and understanding, thereby developing your transferable skills of analysis, evaluation and critical thinking.

The specification offers a broad range of topics including research methods in context, memory, social psychology, attachment, psychopathology, biopsychology, approaches, cognition and development, schizophrenia and forensic psychology.

Is Psychology for you?

You will need to be good at extended writing, enjoy analysing numbers (statistics) and have a keen interest in the human body, particularly the brain. You will need to be able to apply your knowledge to real life scenarios.

Psychology is an exciting and challenging subject that will require hard work and commitment.

Course Components:

Paper 1: Introductory topics to Psychology
Social Influence, Memory, Attachment and Psychopathology

Paper 2: Psychology in context

Key Approaches, Biopsychology and Research Methods

Paper 3: Issues and Options in Psychology

Issues & Debates, Schizophrenia, Gender, and Forensic Psychology.

Assessment at the end of Year 13:

All three components are examined in 2hr exams, each worth 33.3% of the qualification.

Student comments:

"Psychology provides a deeper understanding of the human mind, giving reasons for certain behaviour and actions. You can learn a lot about yourself!"

"Psychology makes you consider your own thinking. The things you learn have an impact both inside and outside the classroom."

SPANISH at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Spanish, but preferably a Grade 7.

Exam board: AQA

Description of subject:

You will build on the basic communication skills learnt at GCSE to cover a much broader and more exciting range of topics of global interest.

Grammar will be studied alongside the topics, allowing you to apply knowledge in your own use of the language. The language is both the subject studied and the medium through which you will deepen your understanding of wider issues.

In addition to your Spanish lessons, you will have individual time with a Foreign Language Assistant. Students may also undertake work experience in Spain.

Assessment at the end of Year 13:

Paper 1: You will be tested on listening, reading and translation via an exam lasting 2.5hrs. (50% of the A Level)

What is assessed?

- Aspects of Hispanic society
- Artistic culture in the Hispanic world
- Multi-culturalism in Hispanic society
- Aspects of political life in the Hispanic world
- Grammar

Paper 2: You will be tested on writing via a 2hr long exam. (20% of the A Level)

What is assessed?

You will study 1 literary text in Spanish and 1 film.

Paper 3: This will test your speaking, and will last 21-23 minutes. (30% of the A Level)

What is assessed?

You will discuss a sub-theme from one of the topics listed under Paper 1 and give a presentation, with further discussion on an individual research project linked to the Hispanic world.

This qualification will improve your employment prospects, in particular with companies who have international branches. Over 60% of British trade is done with non-English speaking countries. Whatever you study, a language is a skill that will give you the edge over other applicants for the same job.

Student comments:

"Spanish A Level gives you an insight into the amazing culture of the Hispanic world."

"The work experience trip gave me the opportunity to live in Spain for a week. ¡Qué fantástico!"

CORE MATHEMATICS at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in Maths (Higher Tier).

The course is designed to support students through the mathematical content in A Level subjects such as Physics, Biology, Chemistry, Economics, Psychology and Geography. We would strongly recommend this course to students who have found GCSE Mathematics difficult but would like to continue to learn Mathematics.

This course will particularly appeal to students who enjoy calculation and the practical applications of mathematics, but do not enjoy the abstract or algebraic aspects of the subject.

Exam board: AQA.

The qualification is formally known as "Level 3 Mathematical Studies (Core Maths)"

Description of subject:

Level 3 Mathematical Studies (Core Maths) provides a journey through many of the mathematical methods required in A Levels in other subjects as well as practical applications of mathematics in the real world.

The course is taught for two lessons per week for one year with examinations at the end of Year 12.

Content includes:

- Analysis of data
- Maths for personal finance
- Estimation
- Using spreadsheets to analyse critically mathematical data and models.
- Correlation and regression
- Critical path and risk analysis
- The normal distribution
- Probability and estimation

Assessment at the end of Year 12:

2 x 1hr 30 minute exams – a calculator is needed for **both** exams.

EXTENDED PROJECT QUALIFICATION at Herschel

Qualifications to start the course:

In addition to the general entry requirements for the Herschel Consortium, you will need at least a Grade 6 in English Language as well as have the ability to work independently on a project, manage your time effectively and meet deadlines.

Description of subject:

The Extended Project Qualification is a one year course that provides you with the opportunity to explore an idea or hobby that really interests you. It is equivalent to an AS Level and will teach you skills that are valued by employers and universities. This course is for you if you are self-motivated and enjoy working independently – whether in a practical way, like designing or performing, or researching, investigating and writing.

For the majority of students at Herschel it will involve a dissertation of 5000 words, though a small number may research and design a product. Examples of recent EPQ research areas by Herschel students include the architecture of the Nazi era, euthanasia, the rise of IS, stem cell research, an Art installation, the Marvel film franchises, Black Lives Matter, Method Acting, sexism in the gaming industry, cosmetic surgery in South Korea, space travel, the meaning of infinity: there really is no limit to the areas for your research!

Once you have decided, you will be given guidance to help develop the skills you need to manage your Project. Whatever you chose, you will be expected to work independently, supported by your teachers. You could learn more about something that interests you: or investigate a controversial topic; expand your knowledge of one of your other subjects; or gain practical skills that will help you in Higher Education and the workplace.

How is the course assessed?

You will be assessed on:

- How well you manage your work, such as planning your time and choosing what methods to use
- How you select and use information and resources throughout the Project
- The range of skills you develop and use
- How effectively you review your own work

At the end of the course, you will achieve an A* to E Grade, equivalent to an AS Level. An A* Grade is currently worth 28 UCAS points.

What the students say

The teaching is very effective, and the teachers and students are friendly. I really enjoy coming to school. I like the way the school pushes you to do your best and gives you responsibility for your learning.

Whenever there is a problem it is easy to talk to a member of staff who gives effective advice on how to get the issue tackled and resolved or you can speak to the Sixth Form Committee. In particular my tutor is an excellent mentor who genuinely cares for his students' academic and personal welfare.

The Sixth Form has many good opportunities (e.g. the Travel Scholarship, Mock Trial, and Duke of Edinburgh) and it's a great place to learn with really supportive teachers.

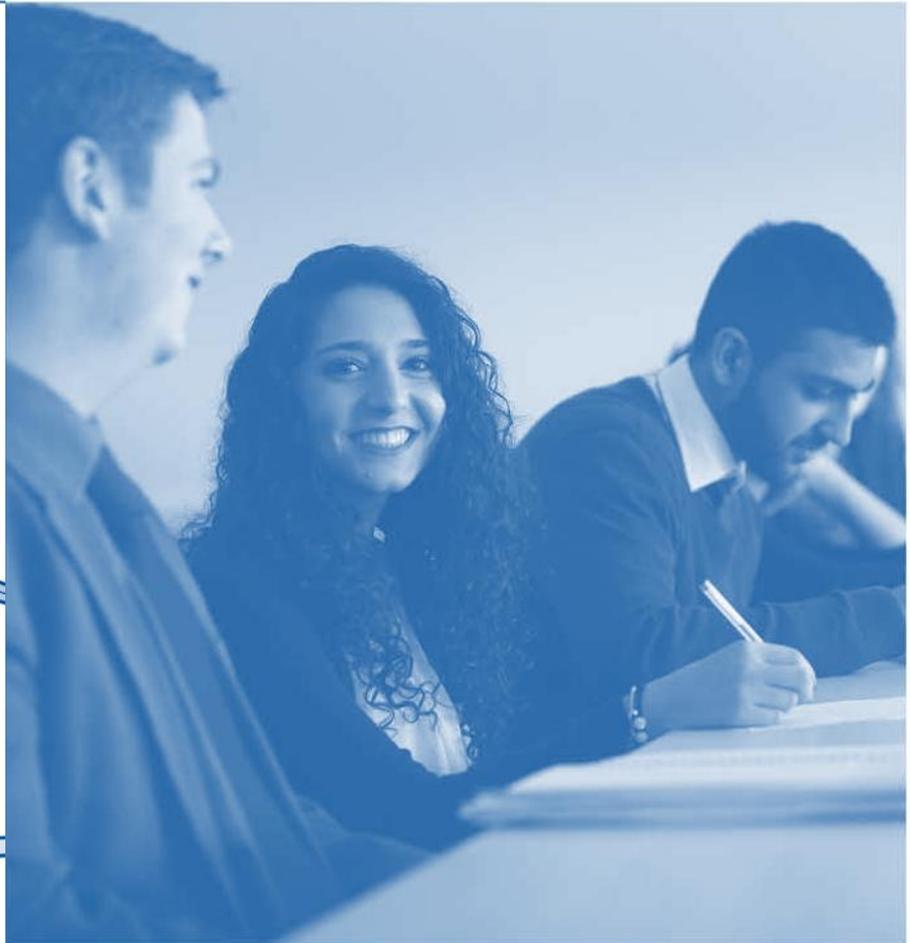
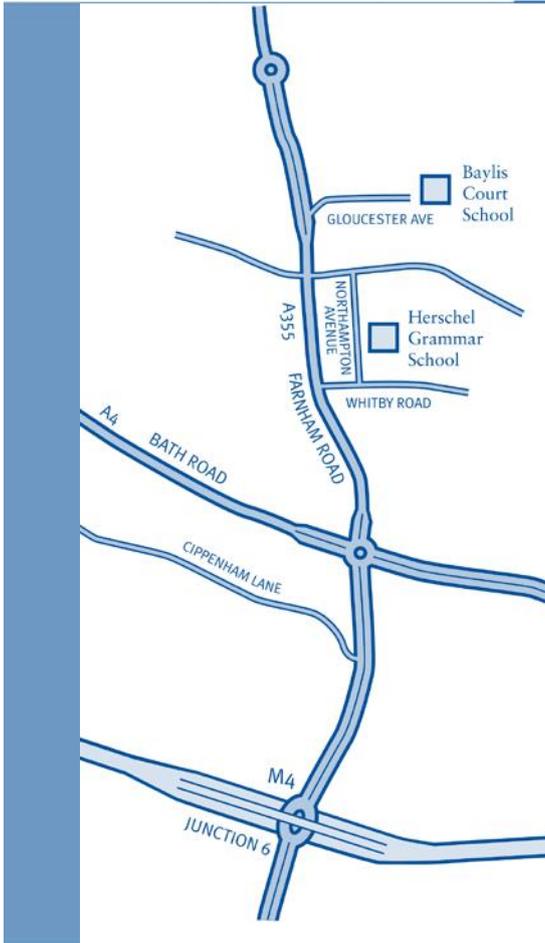
Having been slightly uncertain at the end of GCSEs, joining the Herschel Consortium is probably one of the best decisions I have made because of the quality of teaching and support. For someone who had no idea what I wanted to do at the beginning of the year, it was reassuring to know that there was someone to help me see where my real interests lay, and to guide me through the process on how to pursue them. Staff are really helpful and enthusiastic by genuinely wishing to see us reach our full potential.

The younger pupils look up to us as role models and the teachers are also more open with us.

I think pupils in the Sixth Form are very focused and are determined to reach their potential. There is a general feeling of wanting to do well.

Life in the Sixth Form is a learning curve that has taught me an array of skills and equipped me with experiences for the future. The Sixth Form has provided me with the wonderful opportunity of being a Managing Director in the Young Enterprise scheme. I learnt to delegate tasks effectively, to take responsibility for mishaps and to motivate the team at all times. My organisation and communication skills have vastly improved and we won several trophies along the way!

As part of the Year 12 Community Involvement Programme we carry out an hour of community service each week; I carried out my placement at a local nursery. Overseeing children, assisting with activities and reading stories were just some of my duties. Not only was this something I could include in my personal statement but it was also a stress relieving and pleasurable experience, allowing me to give back to the wider community.



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