REMOVE AND FIFTH FORM

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## REMOVE AND FIFTH FORM

 AT HARROW

The Shell year at Harrow is a study a wide range of subjects. In the Remove, boys narrow their focus to the ten subjects in which they will go on to take (I)GCSE examinations in the Summer of their Fifth Form year. foundation for Sixth Form studies and for a university degree.
In the Remove and Fifth Form, all boys continue to study English, both language and literature, and Mathematics. All boys are also required to take at least one modern foreign language and at least two of the three sciences.
It should be noted that all three sciences are compulsory subjects to GCSE level in the National Curriculum and that there arces are strogly recommended or required A A For example, it would not be advisable to apply for a degre course in Engineering without taking Physics to A level and it is not possible to study Medicine at university without an A level in Chemistry. Boys opting to take only two of the three sciences should therefore consider carefully the implications of that decision for their academic and professional futures. At the same time, we believe that boys should have freedom to play to their academic strengths and intellectual interests in choosing their subjects for the Remove and Fifth For During their Remove and Fifth Form years, boys will also have their first experience of the Elective programme. Electives are unexamined courses that beaks elect to offer and which complement boys' examined subjects, contrast with them or extend beyond them. In the Remove, boys will experience these Electives has ranged in the past from philosophy to oratory, from feminism to etymology. In the Fifth Form, boys can look forward to Elective courses in critical thinking and in subjects not offered at (I)GCSE level such as History of Art and Politics.
Before reaching their decisions on their GCSE subjects, boys should consult with their House Master, tutor, parents and beaks. There will be an opportunity for parents to meet Masters and to discuss their sons options at the Shell Churchill Hall. After a final round of discussions with their tutors and House Masters at the start of the following week all boys must submit their subject choices by the evening of

M E P Gray
Director of Studies
February 2020

Two years ago, the Office of Qualifications and
Wo years ago, the Office of Qualifications and Examinations Regulation (Ofqual) introduced changes to the way in which national GCSE examinations are graded When results are published, candidates will now receive numerical grades on a scale from 1 (the lowest grade) to 9 (the highest grade). All national GCSE qualifications and virtually all the IGCSE courses on which boys entering the Remove will start in September will be graded in this way Heads of Subject at Harrow are responsible for deciding whether to enter boys for national or international qualifications and for selecting the examination boards for their subjects. We believe that it is important for boys to follow the best syllabuses and to take the most suitable examinations available to them, as identified by the teaching have discretion in their choice of examination type and board.

As a result, boys entering the Remove next year will take a variety of qualifications in all their timetabled subjects. Th entries for the inald sulicts in this booklet icluce chosen by the teaching departments.

In summary, here are the principles underlying the numerical grading system.

- The new grade 7 is approximately the same as the forme A grade, with broadly the same proportion of candidates receiving grade 7 and above as previously would have achieved grade A and above.
- Across all subjects nationally, close to $20 \%$ of candidates awarded grade 7 or above will receive grade 9 .
- The grade 8 boundary is equally spaced between the grade 7 and grade 9 boundaries.
- Broadly the same proportion of candidates will receive grade 4 and above as previously would have achieved grade C and above
- The boundaries at grades 5 and 6 will be based on the difference in marks between grades 4 and 7 : grade 5 will be set at one third of the difference in marks and grade 6 at two thirds of the difference in marks.
- The Government's definition of a "good pass" at GCSE s set at grade 5 .
M E P Gray
Director of Studies Academic and Universities Director

Boys should consider their subject choices carefully, taking advice from their House Master, tutor, parents and beaks."

## GCSE AND IGCSE SUBJECTS OFFERED AT HARROW

The subjects we intend to offer in September 2020 are listed below. All boys study English and Mathematics and should groups total of SEVEN more subjects, one from each of the from group 7 and select a minimum of two sciences. We will endeavour to timetable all choices; very occasionally, timetable clashes may mean that a certain combination of subjects is not possible. In such cases, boys and parents will be notified at the earliest opportunity so that a suitable alternative
can be chosen. Occasionally, changes may need to be made to the precise list of subjects offered. Again, boys and parents will also be notified of such changes at the earliest opportunity. If a boy wishes to study a combination of subjects that does not appear to be available below, then he should contact Mr Bailey, the Academic and Universities Director, who will seek hoces will be collated under the supervision H . Be Masters and tutors

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 | Group 6 | Group 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ancient History | Biology | Astronomy | Chemistry | Art | Art | French |
| Art |  <br> Technology | Biology | Geography | Chemistry | Computer Science | German |
| Biology | French |  <br> Technology | Latin | Computer Science | Drama \& Theatre | Italian |
| Physics | Classical | Greek | Geography | Physics |  <br> Technology |  <br> Technology |
|  <br> Philosophy | History | Music | Spanish | PE | Japanese |  |
|  | Latin | Physics |  |  <br> Philosophy | Heography | Mandarin |
|  |  |  |  |  | Latin | Russian |
|  |  |  |  |  | Spanish |  |
|  |  |  |  | Music |  |  |
|  |  |  |  |  |  |  |

## ANCIENT HISTORY

OCR GCSE, Syllabus J198
COURSE CONTENT
Not to know what happened before you were born is to be a child forever. Cicero

Ancient History involves the study of four fascinating topics from Greek and Roman antiquity. There are two examination papers (1 hour 45 minutes each) that cover
two topics each: a 'period' study and a related 'depth' study, each of which is firmly rooted in the analysis of primary sources in translation. The period studies cover the rise of the Persian Empire and the foundation of Rome from early kingship to the Republic. The related depth studies offer topics such as Athens in the Age of Pericles and Alexander the Great, as well as Hannibal and the Second Punic War or Cleopatra: Rome and Egypt. There is no coursework to write in Ancient History. This is a subject that develops careful reading, understanding of the differences between cultures, both ancient ones and our own.

## WHY CHOOSE ANCIENT HISTORY?

Ancient History requires you to be flexible, open minded and willing to engage directly with major writers from the ancient world such as Herodotus, Livy, Arrian and
Plutarch. Having said this, the subject matter itself is when Plutarch. Having said this, the subject matter itself is what
makes Ancient History exciting. From Alexander's extraordinary military achievements, which pushed the boundaries of the known world, to the study of the foundations of Western democracy, warfare and politics, there is much that boys will find appealing. Many boys who do Ancient History will go on to study Ancient History in the Sixth Form and quite a number enjoy the subject so much that they go on to read It at university. Ancient History improves the writing and thinking skills of develop and differ from one another.

## CANDIDATE REQUIREMENTS

If boys enjoy doing the Shell Latin course and covering the background topics on offer, they will enjoy this subject. If they enjoy History, English, Geography or Art,
this subject will appeal to them too. There are no prerequisites except a willingness to engage with the cultures of Greece and Rome.

## COMPLEMENTARY COURSES

Ancient History goes well with any subject but there are perhaps most connections with Latin or Greek, History and English Literature. Study tours abroad (to Rome, Boys can also attend Classical Society meetings, where they can listen to other boys studying classical subjects in the School talking about topics that interest them, or they could even choose to lecture on a topic themselves.


## ASTRONOMY

Edexcel GCSE, Syllabus 2ASO1
COURSE CONTENT
The course will enable boys to understand our position in the universe, the movements of planets and stars, the cycles in the night and daytime sky, and the way in which we use technology to observ
and interact with space. In the Remove year the and interact with space. In the Remove year, the sun and the solar system. In the Fifth Form, we look into the processes involved in the creation of stars and galaxies, cosmological theories and observational techniques. Astro-imaging is a new field of study at Harrow, thanks to our state-of-the art observatory. Whilst the course contains no assessed coursework, boys will be expected to conduct astronomical observations using telescopes in the Rayleigh Obse WHY CHOOSE ASTRONOMY?
This is a subject that many boys find fascinating. Candidates will be required to undertake observations of their own and will have access to the department's state-of-the-art telescopes, CCD
cameras and astronomical imaging software. Some lessons take place outside normal lesson time, lessons take place outside normallesson time, incluaing evening observation inssions in often have
Rayleigh Observatory. The interest boys ofter in Astronomy can quickly lead to their developing a real passion for it and this can be a major stimulus to them pursuing related subjects such as Physics and Mathematics to higher levels, including at university. Harrow has twice in the last ten years been awarded the Good Schools' Guide Award for Best GCS
Astronomy Results in an English School and Astronomy Results in an English School and Presidential Certificate for the highest scores nationally at GCSE.

## COMPLEMENTARY COURSES

Astronomy complements Mathematics and the sciences, particularly Physics, but the variety of
skills taught makes it a good fit with all other Skills taught makes it a good fit with all other
GCSE courses offered at Harrow. Boys choosin GCSE courses offered at Harrow. Boys choo
Astronomy should possess a high level of mathematical competence.

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We look into the processes involved in the creation of stars and galaxies, cosmological theories and observational techniques.'


BIOLOGY
Edexcel IGCSE, Syllabus 4BI1
COURSE CONTENT
Boys start the course at the beginning of the Shell year. It covers a broad range of topic areas including biochemistry, cell biology, human physiology, plant physiology, genetics and heritance, ecology and the environment, and the use of biological resources
(food production, selective breeding, genetic engineering and cloning). Where possible, topics are explored through practical investigation. The course is assessed through two written examinations taken at the end of the Fifth Form. There is no coursework.

## WHY STUDY BIOLOGY?

Biology is a very dynamic subject that dominates science coverage in the news. It addresses key science coverage in the news. It addresses key
concepts that everybody should understand, such as concepts that everybody should understand, such as
how the human body works and how life evolved. Furthermore, in order to make judgements about the merits and ethics of technologies such as genetic engineering and cloning, one must comprehend the science that underpins them. IGCSE Biology, along with Chemistry and Physics, provides a solid beyond. There are numerous biology-related degrees beyond. There are numerous biology-related deg offered by the top universities; popular courses
include Medicine, Biological Sciences, Marine Biolo Biomedical Sciences and Zoology. A Biology degree can lead to careers in a wide range of sectors such as the pharmaceutical industry, medicine, conservation, agriculture, forensics, environmental management and academia.

CANDIDATE REQUIREMENTS
Since many biological phenomena can be experienced directly, typically through observation the subject is more accessible than some other scientific disciplines. It also develops and tests a broader range of skills; the ability to write clear, precise prose is particularly important.

COMPLEMENTARY COURSES
Biology combines well with the other science subjects, Physics and Chemistry. There is also overlap with Geography and Mathematics. There are a number of biology-related societies at Harrow including the Biology Society, Medical Society, Natural History Society and Dissection Society. In addition, with ans interest in ecology and wildlife.

## CHEMISTRY

Edexcel IGCSE, Syllabus 4CH1
COURSE CONTENT
Chemistry IGCSE will give boys a firm grasp of the basics of chemical science. The IGCSE course starts in the Shell year and the next two years build on this. Boys begin the Remove year by learning about why different materials behave as they do. Armed with this polymer materials and other important substances. They study the influential area of organic chemistry - the basis of our fuels and medicines - and learn to calculate and maximise yields in chemical reactions to address environmental impact. The Fifth Form looks at how substances are analysed to determine their identity, the concept of energy in chemistry and the industrial production of some important chemicals fo
the modern world.

WHY STUDY CHEMISTRY?
Practical laboratory skills help to develop a rigorous understanding of the theoretical concepts, while many exciting reactions are demonstrated to ensure the subject really comes alive. Boys will finish the course with a better understanding of the material world in
which we live, and an enhanced ability to investigate, which we live, and an enhanced ability to investigate, practical tasks. Chemistry IGCSE is excellent preparation for $A$ level study. The problem-solving and numerical aspects prepare students for a range of degree courses beyond those directly related to Chemistry, such as Natural Sciences, Biochemistry Materials Science, Medicine, Veterinary Science and Engineering.

CANDIDATE REQUIREMENTS
The subject suits anyone who wants to understand why the world around us has the properties it does. It will appeal to those with a natural curiosity. Boys will be most successful if they can think logically, recall factual material and apply mathematics to solve problems.

COMPLEMENTARY COURSES
Studying Chemistry at IGCSE level fits in very well with the other two sciences and Mathematics. Chemguide is a reliable free online resource (http://www.chemguide. co.uk/igcse/index.html). The Chemistry Department encourages boys to get involved in external competitions run by the Royal Society of Chemistry, such as Top of the Bench. Towards the end of the Fifth Form, boys might begin looking at problems from the
Cambridge Chemistry Challenge (www,C316.org) and the RSC Chemistry Olympiad (http://www.rsc.org/ campaigning-outreach/ outreach/educators/uk-chemistry-olympiad/). Active involvement with the School's Science Society offers a further source of enrichment and collegiality, with the opportunity to present, hear and discuss talks with peers as well as learn from high-profile guest lecturers.


## CLASSICAL GREEK

## OCR GCSE, Syllabus J292

COURSE CONTENT
Classical Greek is a beautiful language that requires an eye for detail, strong analytical and linguistic skills and excellent powers of recall. It is a prestigious subject to take to GCSE, and a rare gem on the curriculum, but it is
important that boys are aware of the challenge it important that boys are aware of the challenge it (see the Latin entry for further details). The prescribed verse literature involves the reading of portions from Homer's lliad and Odyssey. The prescribed prose literature is usually taken from the 'Father of History' Herodotus, whose work includes everything from accounts of the battle of Thermopylae to advice on how to catch a crocodile. Boys studying Classical Greek can expect to be taught in fairly small groups and to look widely a and mythology

## WHY CHOOSE CLASSICAL GREEK?

Few other subjects offer an intellectual challenge quite like Greek and this in itself makes the subject an exciting one to study. The study of Classical Greek consists of a sophisticated study of language, the etymological roots
for much technical vocabulary in English (particularly medical and general scientific terminology), and the study of poetry and prose. Greek authors developed and created many modern genres of literature. Boys will study Greek history, poetry, drama and philosophy and read authors like Homer, Thucydides, Plato with "their feet on the fenders", that is, in the original language. These authors have had an enormous influence on later writers and boys who study Classical Greek develop a better appreciation of literary heritage. Boys who study Latin if they are interested in working towards a university degree in Classics.

## CANDIDATE REQUIREMENTS

Boys who choose GCSE Greek are expected to have studied the language for at least one year (this usually means that they have stuaied it in their Shell year) and the language a struggle in the Shell year then this is probably not a good option for them at GCSE.

## COMPLEMENTARY COURSES

Classical Greek combines well with all subjects. Strong scientists often find the logical element of this classica language makes it a desirable option. Classical Greek and Theology \& Philosophy. Study tours abroad (to mainland Greece, the Greek Islands, Crete etc) are offered by the department and recommended. Boys are also encouraged to attend the Classical Society which meets regularly throughout the year.


Developing computational thinking involves learning to program by writing code. The practical work enables boys to develop their interest in computing and to gain confidence in algorithmic thinking and programming.

## COMPUTER SCIENCE

CIE IGCSE, Syllabus 0478
COURSE CONTENT
The course covers the fundamental principles and practices of computation and algorithmic thinking, and their application in the design and development of computing systems. Computational thinking is an
increasingly important skill which can be developed by learning to program and code in a variety of modern languages. The practical work enables boys to develop their interest in computing and to gain confidence in algorithmic thinking and programming. They develop their understanding of the main principles of problem solving using computers, and apply their
understanding to develop software-based solutions to problems using algorithms and a high-level programming language. They also develop a range of technical skills, as well as the ability to test effectively
and to evaluate solutions. Boys also build their own systems using compatible hardware including custom gaming platforms and the raspberry pi, and have an opportunity to undertake their own software development project at the end of the Remove year.

WHY CHOOSE COMPUTER SCIENCE?
The course is challenging but rewarding, creative and fun, allowing boys to develop their own programs and applications, and to solve technical and mathematica
problems with code. It is unique among all subjects a this level in that it allows boys to solve problems from any scientific discipline using the same logic and mathematical reasoning.

CANDIDATE REQUIREMENTS
The course suits any boy with a fascination for and interest in computing, engineering and the sciences, and a zest for problem-solving. A high level of mathematical competence is hugely beneficial for
pursuing Computer Science - a strong correlation exists between performance in Mathematics and Computer Science. As a rough guide, the subject is best suited to boys in Mathematics divisions 1-3.

## COMPLEMENTARY COURSES

Related subjects include Mathematics and the sciences. The Lower Sixth Elective course in programming follows on well from this IGCSE, and al boys taking Physics A level take an internal course focused on scientific computing in the Summer term
Boys should also join the Computer Science Society.

DESIGN \& TECHNOLOGY
CIE IGCSE, Syllabus 0979
COURSE CONTENT
The CIE IGCSE looks to embolden autonomous and creative problem solvers who will further their understanding and knowledge of design and engineering. In the Remove year, boys will study four core subject areas that prepare them for two project worth $50 \%$, all of which will be completed in the Fifth Form. The course focuses mainly on Product Design, Electronics, Structures and Mechanisms. The IGCSE allows boys to study, design, make and control products, systems and mechanisms that they see and use in everyday life. It also enables them to build their own projects using industrial techniques such as CAD-CAM and 3D printing.

## WHY CHOOSE DESIGN \& TECHNOLOGY?

Design \& Technology enables boys to identify, consider and solve problems through creative thinking, planning and design. Pupils gain technical and design awarenes and develop skills such as initiative, resourcefulness, enquiry and ingenuity. Throughout the course, boys wil become proficient users of 3D printing and computerprogramme software and control systems when designing innovative products, Design \& Technology provides an ideal basis for further study and prepares learners for their future in a rapidly changing technological society. With the core subject areas of Electronics, Structures, Mechanisms and Product Design, it can often provide an excellent foundation fo budding engineers and product designers.

CANDIDATE REQUIREMENTS
Design \& Technology suits thoughtful and creative individuals who are eager to explore, reflect, engage and control the technological world around us.

## COMPLEMENTARY COURSES

Design \& Technology combines well with Physics and Mathematics. It also shares many creative strategies with Art.

## DRAMA

## AQA GCSE, Syllabus 8261

Theatre is a place where we go to hear stories that help us make sense of things. Philip Ridley, Playwright.
COURSE CONTENT
GCSE Drama is a dynamic, challenging course, offering boys insight into a wide range of dramatic genres and forms, as well as helping them to develop skills in analysis, creativity empathy and teamwork.
Harrow's thriving dramatic tradition, and well-resourced Ryan Theatre and Drama Studios, give boys the opportunity to develop their work to a high level. The School's location also enables pupils to see innovative, high-quality performances in and around London. Recent destinations include the National Theatre, the Young Vic and
Shakespeare's Globe.

## What will the course comprise?

Studying and staging extracts from a range of play texts
Regular theatre trips and analysis of productions seen
Devising an original piece of theatre and documenting the process
How is it assessed?
Through practical work - as a performer or designer (30\%)

- By demonstration of collaborative and creative skills through reflective writing (30\%)
Through writing about plays studied and seen in a formal examination (40\%)


WHY CHOOSE DRAMA?
Boys often choose GCSE Drama if they have enjoyed their experiences of drama - as a performer, technician, writer, comic or audience member - and want to pursue their interest further. They also typically enjoy active, group-focused lessons and want to create their own practical work, as well as learn about what other people have created
Drama pupils typically see themselves pursuing A levels, university courses or careers that will require interpersonal, group-work or presentation skills.
A good grade in Drama will show boys to be strons
confident and empathetic communicators, able to work dynamically and creatively with others. The course is much valued by universities and employers as a result.

CANDIDATE REQUIREMENTS
There is no requirement to have previously studied or gained a large amount of experience in drama in order to take the course - candidates simply require
enthusiasm, commitment and creativity
COMPLEMENTARY COURSES
GCSE Drama combines well with any other combination of subjects and is often chosen by boys wanting to balance their choices with a practical, communication and teamwork - are as important for scientists as for artists.


## ENGLISH

English CIE IGCSE, Syllabus 0990 and English Literature CIE IGCSE, Syllabus 0992
COURSE CONTENT
Boys will earn two IGCSE qualifications over two years: English and English Literature. The English GCSE teaches boys to write for a range of purposes creative writing as well as more practical writing (summary analysis, persuasion) Boys will sit two papers (one with a reading focus, one with a writing focus) and there is no coursework component.
The English Literature IGCSE requires boys to read widely across the genres and they will be examined on three set texts: a novel, a play by Shakespeare and a collection of poems. They will also be examined on their reading and literary analysis skills through an 'unseen' paper that will ask them to write about a poem or a prose passage that they have not encountered before. Boys wil st three papers at the end oft

WHY STUDY ENGLISH AND ENGLISH LITERATURE? English is an exciting subject at this level as it allows boys to be creative, to express their own ideas, to debate and discuss them, and to read a great deal. Discussion forms a significant part of English lesson their peers and to argue their position deba need high marks in Elish to strengthen theire. Boys need high marks in English to strengthen their subjects that admissions tutors, as well as future employers, may look at on a candidate's CV. The communication, reading and writing skills that are required to be a success in almost any field of work are taught in English and, regardless of whether boys pursue the subject at A level, their success in this subject will enable them to do well in the subiects they choose to pursue.

## CANDIDATE REQUIREMENTS

The English and English Literature IGCSEs suit all pupils who have a sound grasp of the English language.

COMPLEMENTARY COURSES
Boys' study of English will complement their work in nearly every other GCSE subject, particularly subjects that require essays or that have a written component in the examination. In addition, English will complement boys' cultural pursuits outside the form room, whether this be art, drama or music. Many of the skills developed in English are required in those areas as well.

## GEOGRAPHY

## AQA GCSE, Syllabus 8035

## COURSE CONTEN

GCSE Geography presents a highly relevant programme of study that focuses on the global issues faced by cultures and communities in the modern world. Geography is studied in a balanced framework link between them. Topics of study include the challenge of natural hazards, climate change, tro rainforests, hot deserts, river and coastal landscapes the UK, poverty, deprivation, global shifts in economic power and the challenge of sustainable resource use. Candidates will be encouraged to understand their role in society by considering different viewpoints, values and attitudes, and to think critically about the world in which they live. There is no coursework element but candidates will undertake two geographical inquiries show an understanding of both physical and human geography. Candidates are assessed by written papers at the end of the course. These consist of short, structured responses, as well as opportunities for extended writing

## WHY CHOOSE GEOGRAPHY?

A great deal of emphasis is placed on topicality and A great deal of emphasis is placed on topicality the subject demands the use of up-to-date case
studies in exploring the core concepts and themes Lesson content is chosen to reflect current thinking and interests in geography in the 21st century. Boys will acquire and develop a range of transferable skills, such as numeracy, data interpretation, research skills, critical analysis, report writing and IT. These will support academic enquiry and their career aspirations throughout the rest of their lives. Geography graduates
have one of the highest rates of graduate employment The development of a comprehensive academic skillset is fundamental to this. Business, law and the financial sector also value the broad subject knowledge with which Geography graduates are equipped. For example, a geographer working as a financial risk analyst in a bank would benefit from having an understanding of borders, peace and security issues, distribution of resources, and factors affecting economic growth in various parts of the world.
Geographers enter a very wide range of career areas. is a subject that sets boys up with a firm base for lifelong learning and career development.

## CANDIDATE REQUIREMENTS

Geography supports and suits every boy, being particularly well matched with those who are looking . no prerequisites.


COMPLEMENTARY COURSE
Geography positively complements other humanities subjects, as well as those that are grounded in science and mathematics. The contemporary nature of Geography and the dynamic composition of the GCSE make it a subject that offers opportunities for independent tearming and exiche the because of their broad knowledge base and acute understanding of current affairs, participate effectively in the Geopolitics Society, as well as the Electives that are offered by the department. Fieldwork allows boys to extend their learning out of the form room, initiating early exposure to and subsequent development of independent research and report-writing skills that are fundamental to the successful completion of projectbased work in the Sixth Form

## HISTORY

CIE IGCSE, Syllabus 0977
GOURSE CONTENT
History is the study of the past. The IGCSE syllabus provides an opportunity to study many of the key oth century. Topics include international ref the etwen First and Second World Wars leading the collapse of peace in 1939. the German Weimar Republic and the rise of the Nazis; the Third Reich: the origins of the Cold War; the Cuban Missile Crisis; the Korean and Vietnam Wars; Soviet control of Eastern Europe, followed by Gorbachev and the end of the USSR; and events in Iran and Iraq c.1970-2000. Along the way, boys will encounter some well-known historical figures: notorious dictators like Adolf Hitler. Josef Stain and Saddam Hussein; Brtish prime Churchill and Clement Attlee; and American presidents
including Franklin D Roosevelt, John F Kennedy and Ronald Reagan. Boys wilf also meet some people who may be less familiar: Marinus van der Lubbe, the demented Dutchman who allegedly burned down the German Parliament; Haile Selassie, the Rastafarian from annihilation by fascist Italy: Martin Niemöller the German submarine commander turned theologian who spoke out against Hitler's antisemitism; or Imre Nagy, the brave communist politician who stood up to Soviet aggression in Hungary, to name just a few.

WHY CHOOSE HISTORY?
This course is exciting partly because the events that it covers are so dramatic: in 1923, hyperinflation wiped use banknotes as toilet paper rather than currency; the Wall Street Crash of 1929 threw the Western world into catastrophic economic meltdown; and in 1962 the Cuban Missile Crisis brought us to the brink of a nuclear holocaust and the very extinction of human life as we know it. For some people, History is all the more fascinating because it is true; far from being stories in some exciting work offiction, these events all actually powers of analysis, interpretation and communication all of which are key skills upon which boys will be able to draw further up the School and later in life. In career terms, the transferable skills that are learnt in History can be deployed in a very wide range of occupations. There are historians in banking, business, the law, journalism, politics, the Church and a hundred other occupations. Several members of the current cabinet have History degrees, as do the Archbishop of not necessary to have taken IGCSE History in order to do the A level, it is certainly helpful to have done so.

## CANDIDATE REQUIREMENTS

The paramount requirement for studying IGCSE History is an interest in the past. It is a subject that suits those who enjoy anaysith evidence, participating pesenting an argument In addition an interest reading and some aptitude for writing are helpful.

## COMPLEMENTARY COURSES

History overlaps with and supports many other subjects, either at GCSE or beyond, including English, Classics, either at GCSE or beyond, incluaing English, Classics. Eonomics. Boys opting for IGCSE History will find that there is a very wide range of co-curricular and SuperCurricular activities to support and enhance their studies: talks by eminent historians to the various historical and political societies (the Trevelyan Society for history, the Alexander Society for military history and the Palmerston Society for politics); educational visits in the UK and further afield; exhibitions in the Old Speech Room Gallery; and, of course, many plays, concerts and other cultural events with historical ramifications.

## LATIN

OCR GCSE, Syllabus J282
COURSE CONTENT
GCSE Latin involves the study of the Latin language to a higher level than that covered in the Shell year The boys expand their Latin vocabulary and learn more sophisticated grammar in the Remove year. Canguage paper includes translation from Latin English and comprehension of passages with themes taken from mythology and history. This language element is $50 \%$ of the GCSE. The other $50 \%$ consists of the study and exploration of selections from both Latin prose and verse literature. This is the most exciting part of the course: reading Roman authors gives boys the chance to look at the lives and beliefs of a fascinating ancient culture. The prose literature will cover a range of short extracts from classical
authors linked together by a unifying and often universal theme (family life and relationships, conf and conquest, virtue and vice being recent examples). The verse will be taken from Virgil's famous epic the Aeneid, and will cover the memorable story of the doomed relationship between the Trojan prince Aeneas and the Carthaginian queen Dido.

WHY CHOOSE LATIN?
The study of Latin trains the mind to think accurately about the expressions of language, and to think with logical in its structure, and they consider
sophisticated arguments and ideas in the original words of Roman authors. Latin does not lead in one direction only. It enhances boys' all-round intellectual ability. Boys who study Latin will become better problem solvers, titerary crtics, historians, philosophers gold-standard GCSE, highly valued by admissions tutors at universities and future employers.
Both as a GCSE and later as an A level, Latin fits well alongside humanities and modern languages and in some cases, as a prestigious contrasting subject for a scientist or mathematician. When combined with another classical subject (Classical Greek or Ancient History) A level Latin can lead to the study of Classics at university. With a smaller pool of applicants nationally, Classics is an attractive course at Oxbridg and top Russell Group universities for those with a genuine passion for the subject.
The Classics Department achieves excellent results at
GCSE each year with nearly $40 \%$ of bops GCSE each year with nearly $40 \%$ of boys getting
grade 9 , and $85 \%$ of boys getting 8 -9. Latin is an excellent preparation at GCSE as well for boys who are ultimately interested in studying abroad, and provides an excellent foundation for preparation for the Verbal section of the ACT and SAT.


In terms of careers, there is no limit to what boys can do with Latin. They are choosing to hone their skills to develop a mastery of reading and concise written expression, as well as strong analytical and problemsolving abilities. These are all transferable skills and will always be reckoned marks of distinction. Classicists frequently enter the financial sector, the law (partore (pice), as well as media and

## CANDIDATE REQUIREMENTS

The subject will suit boys with ability and interest in languages and literature. If they enjoy linguistic puzzles and the challenge of problem solving, Latin will suit them also. If they are interested in History, Ancient languages, then Latin will provide a rich perspective on the past, as well as insights into the origins of Europea culture. It will be expected that boys who have done well at Shell Latin will be able to carry on with suitable confidence at GCSE

COMPLEMENTARY COURSES _atin combines well with all subjects. Strong scientists often find that the logical element of a classical language makes it a desirable option. therwise, Latin combines well with other classical subjects (Classical Greek, Ancient History), History Rome, Pompeii, mainland Greece, Crete and many other destinations) are recommended. Boys should also attempt to attend meetings of the Classical Society, where they can listen to other boys studying classical subjects in the School talking about topics that interest them, or they could even choose to lecture on a topic themselves. The GCSE in the Oxenham Latin Reading Competition: hearing the literature read aloud really brings it to life. We also offer essay prizes in the Fifth Form.

MATHEMATICS
Edexcel IGCSE, Syllabus 4MA1
COURSE CONTENT
Mathematics involves the solving of problems within a logical framework. The course consists of the standard branches of Mathematics (number, algebra, shape and space, and statistics), but also begins the study of A level course. We aim to enrich and stretch at all levels as well as make sure that there is suitable levels as well as make sure that there is sultable
consolidation time before examinations. Boys in the top division take an accelerated course and have the opportunity, in addition to the IGCSE, to take the free-standing Additional Mathematics qualification in the Fifth Form. Boys in the second division also study the Additional Mathematics course so that the study of Further Mathematics in the Sixth Form is an option for all good mathematicians.

WHY STUDY MATHEMATICS?
The study of Mathematics can take a variety of different forms at university, from the purest form of the subject, dealing with abstract algebra, through to scientific research, computing and the social sciences. It is also the language of finance and Financial can lead to many lucrative careers. Mathematics th Harrow provides a solid foundation in many areas of the subject from calculus, trigonometry, matrices and complex numbers to mechanics and statistics. If boys like solving problems and enjoy getting the correct answer, Mathematics is a good choice.

CANDIDATE REQUIREMENTS
Mathematics at GCSE or IGCSE is essential for nearly all university courses and future employment.

## COMPLEMENTARY COURSES

Mathematics encapsulates the language and research methods for all sciences, computing, finance and increasingly - through statistics and other newer branches of the subject - all areas of life. There are available by authors such as Alex Bellos and Simon Singh, both of whom have given talks to the Mathematical Society.

Reading Roman authors gives boys the chance to look through the keyhole at the lives and beliefs of a fascinating ancient culture."


## JAPANESE

Edexcel GCSE, Syllabus 1JAO
COURSE CONTENT
All four skill areas of listening, speaking, reading and writing are formally tested and externally marked. Each
skill area represents $25 \%$ of the skill area represents $25 \%$ of the overall final grade based around the following five topics:

1. Identity and culture
2. Local area, holiday and travel
3. School
4. Future aspirations, study and work
5. International and global dimensions

Boys' verbal and written expression, vocabulary and grammatical structures are based on these topic areas. The Listening paper is 45 minutes in duration and both
the questions and answers are in English, responding the questions and answers are in English, responding
to aural material that is spoken by native Japanese. The Speaking paper is 10-12 minutes in duration and consists of three tasks:

1. Role-play on a topic allocated by Edexce
2. Questions based on a prescribed picture stimulus
3. Questions based on a prescribed picture stimu 3. Known by the pupil and one unknown and selected by Edexcel
The Reading paper is 65 minutes in duration and boys must give multiple-choice responses and short written answers to passages of varying lengths. There is also a short translation from Japanese to English. The Writing paper is 1 hour and 25 minutes in duration and is divided into three sections: one short answer, one English. The written paper must demonstrate the candidate's proficiency in all three scripts used in the Japanese language: Hiragana, Katakana and 200 of the Kanji (Chinese characters).

WHY STUDY JAPANESE?
Japan is the world's third largest economy and is the lingua franca in the Far East in trade and commerce. Many British schools do not offer this useful language.
It is a subject that sets one apart from one's peers and has often been a point of discussion in Oxbridge interviews due to its rarity as an examined subject.


## RUSSIAN

Edexcel GCSE, Syllabus 1RUO
COURSE CONTENT
The overall course content is based around five main topic areas: identity and culture; local area, holiday and travel; school; future aspirations, study and Grammatical structures are studied within these ontexts and topic-related vocabulary is built up over the course. The course aims to develop boys ability to communicate with Russian native speakers in both speech and writing, and to increase their awareness of the culture of Russian-speaking communities and countries.
绪 reading and writing) is formally tested at the end of
the two-year course by externally assessed examinations. All the examinations, oral and written, focus on the topics listed above. The speaking test requires boys to complete three tasks: to participate in a role-play exercise based on one topic drawn from the above ist, to respond to a series of questions based on engage in two conversations, one of which is based on topic chosen by the boy in advance of the assessment, with the other allocated by the
examination board. The speaking test is conducted by the boy's language beak and the recording is submitted to the examination board for external marking. The listening test requires boys to respond to multipleresponse and short-answer open-response questions based on a recoraing featuring native speakers. In the of written Russian across a range of different types of texts, including advertisements, emails, letters, articles and literary texts, and by answering multiple-response and short-answer questions. In the writing test, boys are assessed on their ability to communicate effectively through writing in Russian for different purposes and audiences. They are required to produce responses of varying lengths and types, expressing their ideas and opinions in Russian. The GCSE course leads well into Form from grades $9-7$ at GCSE should find the transition straightforward.
During their preparation for the GCSE boys are given an opportunity to participate in a trip to boys are given an opportunity to participate in a trip to
Moscow and St Petersburg, which, in addition to sightseeing and other cultural activities, includes a spent at a Russian school. They can also join the Slavonic Cultural Society in order to enrich their studies of Russian with a wide range of cultural and languagebased activities such as theatre, ballet and cinema outings, lectures, essay and poetry recital competitions and traditional meals. Boys who decide to study the organising work experience in Russia in the Sixth Form.

## WHY CHOOSE RUSSIAN?

Wissian is a useful language in today's global economy; it is the eighth most-spoken language in the world by number of native speakers and the fifth by total Russian is only offered by a relatively small number of schools, affording it something of a unique status. As such, the ability to speak the language can significantly help those who have mastered it to gain entry to the best UK universities where, should a boy decide to study the language at degree level, he can combine it with either another foreign language or subjects such as History, Politics or Economics, and to the best US universities where this can be combined with a wide Business. For those following this path Russian can be Busiess. For hose increasingly competitive iob market as more and more European businesses are expanding their operations eastwards.


MUSIC
Edexcel GCSE, Syllabus 1MUO1
COURSE CONTENT
This subject is suitable for any boy who enjoys making music and can play an instrument or sing to a reasonable standard. As part of the course, boys will learn to compose their own music and will learn
about many styles of classical and popular music. about many styles of Classical and popular music.
Boys are assessed by coursework compositions and Boys are assessed by coursework compositions and
performances and by a final listening examination. The syllabus is based around four areas of study: instrumental music (including pieces by Bach and Beethoven); vocal music (including songs by Purcell and Queen); music for stage and screen (including music from Wicked and Star Wars $/ \mathrm{V}$; and fusion pieces influenced by African, Latin American and British folk styles. GCSE Music provides a solid foundation for the subject at A level.

## WHY CHOOSE MUSIC

Boys enjoy this subject and it enhances and enriches their other musical experiences in whichever musical fields they excel. There are growing numbers of Harrovians going on to study Music or Music Technology at Alevel and Meend A GCSE and Alevel, Music is highly res
tutors at top universities.

## CANDIDATE REQUIREMENTS

Any boy who enjoys performing and composing music will relish this course. At Harrow, we would expect boys to have achieved at least Grade 5 on their
first instrument by the time they sit the GCSE papers first instrument by the time they sit the GCSE papers.
Many boys are well beyond this standard, thus making Many boys are well beyond this standard, thus making
a grade 9 in the GCSE easily achievable. Some theory a grade 9 in the GCSE easily achievable. Some the
knowledge is desirable; most boys have usually achieved Grade 5 Theory before commencing the course. There are no prerequisites but any boy who is in doubt as to his suitability should speak to his Shell Music division master or instrumental teacher.


At both GCSE and A level Music is highly respected by admissions tutors at top universities."


PHYSICAL EDUCATION
OCR GCSE Physical Education J587

## COURSE CONTENT

This GCSE in Physical Education will equip boys with the knowledge, understanding, skills and values they need to be able to develop and maintain their performance in physical activities. Boys will also gain
an understanding of how physical activities benefit health, fitness and wellbeing.
The course aims to enable boys to

- develop theoretical knowledge and understanding of the factors that underpin physical activit and sport, and to use this knowledge and
- understand how the physiological and psychological state affects performance in physical activity and sport
$\square$ perform effectively in different physical activities by developing skills and techniques, and by selecting and using tactics, strategies and compositional ideas;
develop their abiity to analyse and evaluate to improve performance in physical activity and sport;
- understand the contribution that physical activity and sport make to health, fitness and wellbeing; and
- understand the key socio-cultural influences that can affect people's involvement in physical activity and sport.

WHY CHOOSE PHYSICAL EDUCATION? Sports Science and Physical Education have a huge impact on the world of sport at elite as well as at grassroots level. This GCSE course has a blend of the practical and the theoretical, and allows boys to demonstrate their sporting skill as well as to develop
their knowledge of anatomy, physiology and the science behind sport. There are courses in Sports Science, Physical Education and Sport at good universities all over the world.

CANDIDATE REQUIREMENTS
Boys should have a passion for sport and the sciences.

COMPLEMENTARY COURSES
Physical Education combines well with Biology, Chemistry and Physics.

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The course has a blend of practical and theory, and allows boys to demonstrate their sporting skill as well as to develop their knowledge of human anatomy and physiology."

## PHYSICS

Edexcel IGCSE, Syllabus 4PH1
COURSE CONTENT
Topics covered range from the traditional, such as mechanics and electricity, to the more cutting edge, such as astrophysics and particle physics. This course follows traditional linear approach to instilling the fundament
principles of the subject and will provide boys with principles of the subject and will provide boys with
excellent preparation for A level. Physical principles and excellent preparation for A level. Physical principles and laws are made accessibation to and by practical
everyday relevant situations demonstrations and class experiments. Boys have plethora of practical experience but there is no coursework element.

WHY STUDY PHYSICS?
The course is challenging but stimulating and fun. Physics is unique among all academic disciplines at this level in that it extends boys' conceptual understanding and problem-solving skills in equal measure.

## CANDIDATE REQUIREMENTS

The subject suits any boy with an enquiring mind and an interest in the world around them. Mathematics to a hig level of competence is essential for pursuing Physics.

COMPLEMENTARY COURSES
Related subiects include Mathematics and Chemistry.


THEOLOGY \& PHILOSOPHY
AQA GCSE, Religious Studies Specification A, Syllabus 8062
course content
GCSE Religious Studies provides an opportunity to study beliefs, teachings and practices in addition to philosophy and applied ethics from Christian, Is arguments for and against the existence of God, and conflict, crime and punishment, and human rights and social justice. In addition, there is a study of sources of wisdom and authority, founders of religions, rules for living, worship and places of worship.

WHY CHOOSE THEOLOGY AND PHILOSOPHY? In addition to receiving an excellent introduction to key philosophical and ethical issues, pupils will develop valuable analytical and evaluative skiis, which Theology \& Philosophy is a broad subject enabling access to many degree courses and preventing access to none, with good links with humanities subjects such as English, History and Law. In terms of careers, there is a plethora of options from law to medicine to marketing.

## CANDIDATE REQUIREMENTS

The subject will suit any boy with a willingness to learn and an enquiring mind. It challenges boys' own ideas and helps them to see the ideas of others in a fresh develop analytical skills.

COMPLEMENTARY COURSES
Theology \& Philosophy combines well with a range of other subjects at GCSE. Anyone considering studying the subject would benefit from reading The God Delusion by Richard Dawkins, The Dawkins Delusion by Alister McGrath, The Puzzle of Christianity, Bible Matters and Ethics Matters by Peter Vardy, as well as regulany checking the Comment and Opinion sections of the ethical and philosophical discussions.

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Theology \& Philosophy is a broad subject, enabling access to many degree courses and preventing access to none."

## FREQUENTLY ASKED QUESTIONS

WHAT'S THE DIFFERENCE BETWEEN A GCSE AND AN IGCSE?
An IGCSE is an International General Certificate of Secondary Education, as opposed to a General Certificate of Secondary Education. IGCSEs are often offered by the same examination boards as GCSEs, but we find them in certain subjects to be slightly more rigorous in content and structure, hence better preparation for Sixth Form studies

WHY ARE SOME SUBJECTS COMPULSORY?
We consider certain subjects to be core subjects in the curriculum. This is in line with the National Curriculum and good practice at other independent schools. Compulsory subjects at (I)GCSE at Harrow include English, Mathematics and at least two sciences, along with at least one modern foreign language. All boys then choose, in consultation with their tutor, House Master and relevant Heads of Subject, other optional subjects to ensure a rounded and balanced curriculum

## CAN BOYS TAKE A GCSE OR IGCSE EARLY?

 We tend to discourage boys from taking examinations early. Instead, we stretch and extend boys beyond the syllabus and then do our best to ensure they are read to sit their (I)GCSE examinations when they are more mature, at the end of the Fifth Form. Some boys who are native speakers in a language might, however, tak the examination in this language earlyIF I DON'T TAKE A SUBJECT AT GCSE/IGCSE, CAN STILL TAKE IT AT A LEVEL?
Almost without exception, it is a great advantage to study a subject at (I)GCSE if you also want to study it in the Sixth Form. If you wish to study a language for A level, then you must select it now for (I)GCSE. There are some subjects that you may be allowed to take in the Sixth Form even if you have not studied them at (I)GCSE, but you will need to seek advice from the Head of Subject.



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