

# CHARTERHOUSE 

(I)GCSE subjects for September 2021

A Guide for Pupils and Parents

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## The Curriculum

## REMOVE OPTIONS 2021

In the Remove and Fifth Form the compulsory examined core of the curriculum is comprised of English Language, English Literature, Mathematics and the study of three sciences: Biology, Chemistry and Physics.

Our expectation is that pupils will study all three Sciences with a view to sitting them as three separate IGCSE subjects in the summer of 2023.

However, it is possible for pupils who do not intend to continue with Sciences post-IGCSE to study IGCSE Science (Double Award). Under this option, pupils continue to study all three sciences but cover less content in each, leading to two IGCSE grades. This therefore allows another option subject to be studied.

Either four (for those taking three separate sciences at IGCSE) or five (for those choosing double award) additional subjects are chosen from the list below; at least one of these choices must be French, German or Spanish.

Art, Classical Civilisation, Classical Greek, Computer Science, Design and Technology, Drama, Geography, History, Latin, French, German, Spanish, Music and Religious Studies.

Public examinations in all subjects are taken at either GCSE or IGCSE at the end of the Fifth Form. Departments choose the best course for their subject and the two qualifications are viewed as equivalent for the purposes of university entrance. The Remove option arrangements are planned according to demand and, although it is usually possible to accommodate all requested subject combinations, we do occasionally need to revisit a pupil's options where it has simply not been possible to construct the timetable to provide his particular choices.

Pupils are divisioned separately by level of attainment in Mathematics and, where possible or desirable, in languages, Sciences and English; all other subjects are typically mixed ability groups, depending on a pupil's combination of options.

Some information about the available (I)GCSE courses in all subjects is given below. Further information is available from the Head of Department of the subject concerned or from the subject teacher. Pupils will be asked to make their subject choices by Monday $\mathbf{2 2}^{\text {nd }}$ March.

## The Core Subjects

## English Language <br> (Edexcel IGCSE - Specification B, EA1)

All Carthusians complete an English Language IGCSE designed to develop their oral and written responses to material that is taken from a variety of sources. The course hones their ability to respond to the ways in which writers construct ideas and achieve their effects. Pupils are taught how to convey meaning in written language, matching style to audience and purpose.

Two pieces of written coursework are submitted, comprising 40\% of the overall grade: one assesses their analysis of either poetry or prose from the board's anthology; the other requires a piece of imaginative writing. The examination, worth $60 \%$, tests pupils' understanding of nonfiction passage and their evaluation of writers' use of linguistic devices. It also includes a persuasive or informative writing task which rewards accurate, well-structured and engaging written communication.

## Literature in English

(CIE IGCSE - 0992)

The course in English Literature allows for a wide-range of texts and genres to be studied across the two years, developing pupil's ability to analyse language and form coherent written arguments. By the end of the course, it is expected that pupils will have an appreciation of the rich history of literature in English.

The qualification is assessed by a mixture of open and closed book exams at the end of the course. Paper $1(50 \%$, closed book) involves the study of a novel and a selection of poetry. Paper 3 ( $25 \%$, open book) is examined on a drama text, which for Carthusians will be a play by Shakespeare. Paper 4 is an unseen exam (25\%), which allows for the study of a variety of literature throughout the course in preparation.

The course is ideal preparation for English Literature A Level and other essay-based subjects in the Specialists.

## Mathematics

(Edexcel IGCSE - 4MA1 - Specification A)

The Edexcel IGCSE in Mathematics (Specification A) qualification enables pupils to:

- develop their knowledge and understanding of mathematical concepts and techniques
- acquire a foundation of mathematical skills for further study in the subject or related areas
- enjoy using and applying mathematical techniques and concepts, and become confident to use mathematics to solve problems
- appreciate the importance of mathematics in society, employment and study.

The course covers four main areas of Mathematics: Number, Algebra, Geometry and Statistics as well as introducing Calculus.

The course is examined by two written papers both requiring a calculator and there is no coursework. All pupils take the Higher Tier papers of this qualification.

## Science

It is anticipated that the significant majority of Carthusians will study all three Sciences to IGCSE level, leading to three IGCSE grades in Biology, Chemistry and Physics.

However, to increase flexibility for the small number of pupils for whom this may not be appropriate, it will be possible to opt for IGCSE Science (Double Award); this will allow the study of another option subject at IGCSE, so pupils will still have the same number of qualifications.

It should be noted that any pupil likely to study any one of the Sciences at Specialist level is strongly advised to study all three (separate) Sciences at IGCSE.

All of the science courses act as suitable preparation for further studies in the relevant subject, whatever the future course of study.

# Biology <br> (Edexcel IGCSE - 4BIO) 

The course aims to stimulate a love for Biology, whether pupils wish to study it to Specialist level or not. The syllabus is broad, ranging from DNA and molecular biology, to human physiology, ecosystems and biotechnology. Many aspects are highly relevant to the human condition including the topics of diet \& nutrition; reproductive biology; lungs (including smoking / vaping); heart physiology (sport, fitness \& exercise); vaccinations and immunity; nervous system (linking to memory and drugs); human impacts on the environment; modern agriculture; and the use of stem cells and genetic engineering. It also provides the factual basis for understanding of the ethical and other issues arising from the current explosive growth of biotechnologies. There is no formal coursework, but there is a significant focus on experimentation and the scientific method throughout the course. Charterhouse takes a practical led approach with pupils learning through frequent experimental work. The data led empirical approach, coupled with logical analysis, supports a wide range of Specialist subjects and career choices, whether in the bioscience field or not.

## Chemistry

(Edexcel IGCSE - 4CH1)

The course aims to introduce pupils to the unifying patterns and themes of chemistry, to appreciate the investigative and practical nature of the subject and to develop a logical approach to problem solving in a wider context. The emphasis of the course lies in a rigorous treatment of elementary chemistry and fundamental practical skills. The assessment of practical and investigative skills within the written papers, rather than by a practical coursework component or modular practical assessments, allows the department to deliver a wide range of practical teaching appropriate to the attainment of the pupils.

## Physics

(Edexcel IGCSE - 4PHO)

From the formation of a galaxy to the bouncing of a ball, Physics helps us to understand the universe in which we live. Throughout the course pupils will gain an understanding of the physical principles behind such things as mechanics, optics, electricity and magnetism, waves, nuclear physics and astrophysics.

Physics is both satisfyingly rigorous in its treatment of the theory behind the workings of nature and in its treatment of the practical skills required to become a methodical and rounded scientist. In addition to developing mathematical and problem solving skills, we aim to emphasise the role of Physics in terms of its social, economic and environmental importance. The world would be a very different place without wireless communication, the electric generator and much more!

## The Option Subjects

## Art <br> (AQA GCSE - 4202)

This is a forward thinking course which promotes self-expression, problem solving and creativity underpinned by a knowledge of traditional as well as new and emerging media. Pupils produce practical and critical / contextual work across a wide range of disciplines, including drawing, painting, mixed-media, sculpture, installation, printmaking, ceramics, lens-based media, film, animation, video and photography.

During the first year, pupils are taught to explore new ideas and techniques and to build a portfolio, with sketchbooks and final outcomes showing an increasingly personal direction in creative output. Visits to London as well as local exhibitions inform and inspire their work with pupils studying a wide range of artists, designers and architects from around the globe. In the second year, pupils continue to develop their portfolio; in January, they receive an externally set task which they have unlimited time to prepare, building on the skills they have learnt in their portfolio unit; pupils then produce a final piece of work in their chosen media, undertaken over ten hours.

The course culminates with a final exhibition in Studio which is an opportunity for pupils to showcase the wide range of artwork they have developed over two years.

## Classical Civilisation <br> (OCR GCSE - J199)

Classical Civilisation GCSE develops pupils' ability to analyse historical and literary sources and utilise these to produce coherent written arguments. We explore the culture of Greece and Rome through art, archaeology and original literary sources in translation. Pupils sit two examination papers, both worth $50 \%$ of the course, on topics including 'Roman City Life' or 'The Homeric World', followed by either 'Myth and Religion' or 'Women in the Ancient World'.

The course is demanding: pupils are required to assimilate a great deal of detailed knowledge across both topics, and must memorise, interpret and evaluate original sources to use in extended essays. Pupils must consult their Classics teacher to discuss their suitability for the subject. The course is ideal preparation for pupils considering careers that require high degrees of analytical skill, involve the interpretation of complex data or the delivery of evidence-based argument.

## Classical Greek

(OCR GCSE - J292)

Greek GCSE develops pupils' skills in problem-solving, accuracy and analysis whilst giving them the opportunity to encounter some of the greatest works of western literature in the language of the Greeks themselves. Pupils are required to demonstrate their linguistic competence in one unit by translation of unprepared passages of Greek into English and by comprehension exercises. A further two units of study explore works of prose and verse in the original language: the subject matter ranges from social anthropology and philosophy to Odysseus' epic journey home from Troy and Greek tragedy. Set texts are studied in detail, and, in the examination, passages are given for translation and comment on context, background and literary content. All exam papers are marked externally and there is no coursework. Pupils must have studied Greek in the fourth form to embark on the GCSE. The course is ideal preparation for pupils considering careers that require high degrees of linguistic, analytical or technical skill.

## Computer Science

(CIE IGCSE - 0984)

Pupils taking the IGCSE in Computer Science will develop their understanding of the main principles of problem solving using computers. They can apply their understanding to develop computer-based solutions to problems using algorithms. Pupils will be taught to code using Python, a popular high-level programming language, but the fundamental techniques will provide pupils the skillset to learn other languages. The skills learnt can also be used in other areas of study and in everyday life.

Learners will develop a range of technical skills, as well as being able to effectively test and evaluate computing solutions. This course will help learners appreciate current and emerging computing technologies, the benefits of their use and recognise the ethical issues and potential risks when using computers. The course is assessed by two examinations that are marked externally; there is no coursework.

This is a course requiring pupils to think both logically and creatively; it will particularly be suited to pupils who enjoy problem solving and have a good understanding and high level of competence in Maths and Physics. Please note that Computer Science is only available alongside three individual sciences, and not for Double Award scientists.

## Design and Technology: Resistant Materials

(CIE IGCSE - 0979)

Over the two years of study for the iGCSE, the Design and Technology Department introduces pupils to a range of design techniques, workshop practice and an education about how designers affect our world today. Pupils are given coursework which expects them to respond to real-world design briefs and, in the Fifth Form, they spend the entire year designing and developing a product of their choosing. Creativity and originality are central to the course and experimentation with a wide range of materials and techniques is encouraged. Pupils' final ideas are created in the JDTC's well-equipped workshop using CAD/CAM technology, as well as traditional manufacturing techniques. Pupils then evaluate their design proposals in the context of form, function and commercial appeal. The course aspires to mirror contemporary design practice and prepares pupils for the 3D Design course offered at A Level.

Museum trips (both domestic and abroad), competitions and design lectures enrich this course. $50 \%$ of the final iGCSE assessment is coursework-based with a two part external examination paper making up the remaining $50 \%$.

## Drama

(Edexcel GCSE - 1DRO)

GCSE Drama is a qualification that will be engage pupils through encouraging creativity. Key skills that are developed over the 2-year course are communication, empathy, confidence building, collaboration as well as performance and design skills. The main area of focus is on practical work, which reflects contemporary theatre practice as well as providing pupils the opportunity to reflect on the world around them. There are also numerous opportunities through the course to evaluate live theatre productions.

There are three components to the GCSE: The first is devising, where pupils will develop their practical skills to create a powerful and original piece of theatre. Within this, they can choose a performer or designer pathway and will have the opportunity to perform this to an audience. This work is supported by a written portfolio and is internally marked.

The second is performance from a text, where pupils perform in or design for two key extracts from a performance text. This is externally examined by a visiting examiner in the second year. The final component is a written examination, which includes an evaluation of live theatre, and the study of one set text. Choices of set texts include; 'An Inspector Calls', J B Priestley, 'The Crucible', Arthur Miller and 'DNA', Dennis Kelly.

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Geography
(Edexcel IGCSE - 4GEO)
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The IGCSE Geography course provides an opportunity for pupils to gain an understanding of the world in all its guises; it is a broad-based subject which develops a number of intellectual skills, including literacy, numeracy, diagrammatic representation, oral presentation skills and the application of ICT. The course encourages the use of fieldwork to underpin knowledge and understanding.

The IGCSE is assessed through two external examinations; there is no coursework. In Section A (The Natural Environment and People), pupils complete two of the following three topics: River Environments, Coastal Environments and Hazardous Environments. In Section B (People and their Environments), they again complete two of the following three topics: Economic Activity \& Energy, Ecosystems \& Rural Environments and Urban Environments. In Section C (Practical Geographical Enquiry), pupils are tested on the development of practical geographical enquiry skills related to fieldwork (this will require a field trip within the UK and, depending on the location, may be residential) on each selected topic from Sections A and B. In Section D (Global Issues), pupils study one topic chosen from: Fragile Environments, Globalisation \& Migration and Development \& Human Welfare.

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History
(CIE IGCSE - 0470)
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The IGCSE History course covers International Relations from 1919 to 2000. It begins with a study of the attempts at peace-making after the First World War, followed by the collapse of peace in the 1930s. The Cold War is traced from its origins to the collapse of the Soviet Union and its satellite states, and the question of why events in the Gulf c.1970-2000 matter is analysed. In addition, the history of a single country (Germany 1918-45) is studied in more depth: one piece of coursework on Nazi Germany is also undertaken, amounting to $27 \%$ of the final grade. Emphasis is placed on a variety of skills, especially the ability to analyse documentary material and communicate relevant information effectively.

IGCSE History is not a prerequisite for Specialist study in History.

## Latin <br> (OCR GCSE - J282)

Latin GCSE develops pupils' skills in problem-solving, accuracy and analysis whilst giving them the opportunity to encounter some of the greatest works of western literature in the language of the Romans themselves. Pupils are required to demonstrate their linguistic competence in one unit by translation of unprepared passages of Latin into English and by comprehension exercises. A further two units of study explore works of prose and verse in the original language: the subject matter ranges from ancient sorcery and unrequited love to an heroic trip to the Underworld. Set texts are studied in detail, and, in the examination, passages are given for translation and comment on context, background and literary content. All exam papers are marked externally and there is no coursework. Pupils must have studied Latin in the fourth form to embark on the GCSE. The course is ideal preparation for pupils considering careers that require high degrees of linguistic, analytical or technical skill.

## Modern Languages

| French |
| :---: | :---: |
| (AQA GCSE - 8658) |
| German |
| (AQA GCSE - 8668) |
| Spanish |
| (AQA GCSE - 8698) |

Pupils who study foreign languages at Charterhouse will be taught to express themselves confidently and accurately. Considerable emphasis is placed upon the regular acquisition and practical use of new vocabulary. A broad range of topical listening and reading material is covered in hash, in conjunction with thorough grammatical explanations and exercises. To study any of these languages as a Remove, the language must have been studied in the Fourth Form.

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Music
(CIE IGCSE - 0410)
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Music IGCSE allows pupils to develop skills in listening, performing and composing. Music from the Western tradition (Baroque, Classical, Romantic and Twentieth Century) is studied alongside music from around the world (African and Arabic music, and music from Latin America, India, China, Japan and Indonesia). Students are encouraged to enhance their understanding, appreciation and enjoyment of a wide variety of musical cultures.

By way of coursework, students also develop their practical musical skills. Performances are given on an instrument of their choice, both individually and in a group of other musicians. Through a carefully guided course, students are taught the basics of composition, culminating in the composition of two pieces in their own style.

## Theology, Philosophy and Ethics <br> (Religious Studies) <br> (Edexcel IGCSE - 4RSO/01)

This course has one singular focus and aim: to equip young people for the ethical and philosophical questions they will encounter in their lives. There are three core components of the course, all intimately related to pressing issues in our world today from ethics, to philosophy and an in-depth study of Islam.

- Modern ethical issues: Crime and Punishment, War and Conflict, Euthanasia, Human Rights, Discrimination and Racism
- Philosophy: the Meaning of Life, Evil and Suffering, the existence of God, Determinism: is free will an illusion?
- Islam: Sunni and Shi'ah Islam, the Qur'an and the Prophet Muhammad

The course is perfectly suited to those who thrive in debate, discussion and who want to learn how to win an argument both orally and in the written word. It teaches pupils to analyse, evaluate and assess different points of view, with the aim of coming to an understanding of their own outlook on these complex and fascinating issues.

There are two papers and no course work.

## Contact Details

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