BYRON COLLEGE

THE BRITISH INTERNATIONAL SCHOOL

IGCSE - GCSE OPTIONS

Information & Guidance Booklet 2026

IGCSE Mathematics (Exam Board: Cambridge, Syllabus Code: 0580) is a compulsory course that is offered to all students entering Year 10 at Byron College.

The course is differentiated and is taught at **two** levels:

- Mathematics **CORE** - for students who need a basic menu of essential mathematical skills;
- Mathematics **EXTENDED** - for students who wish to continue with mathematics at Advanced level.

Why study Maths at IGCSE Level?

The aims of the Cambridge IGCSE in Maths are to encourage students to:

- develop their mathematical knowledge and oral, written and practical skills in a way which encourages confidence and provides satisfaction and enjoyment;
- apply mathematics in everyday situations and develop an understanding of the part which mathematics plays in the world around them;
- solve problems, present the solutions clearly, check and interpret the results;
- recognize when and how a situation may be represented mathematically, identify and interpret relevant factors and, where necessary, select an appropriate mathematical method to solve the problem;
- use mathematics as a means of communication with emphasis on the use of clear expression;
- develop an ability to apply mathematics in other subjects, particularly science and technology;
- develop their mathematical abilities by considering problems and conducting individual and co- operative enquiry and experiment, including extended pieces of work of a practical and investigative kind;

What will I learn?

Cambridge IGCSE Mathematics encourages the development of mathematical knowledge as a key life skill, and as a basis for more advanced study. The syllabus builds learners' confidence by helping them develop a feel for numbers, patterns and relationships, and places a strong emphasis on solving problems and presenting and interpreting results. Learners also gain an understanding of how to communicate and reason using mathematical concepts.

How will I be assessed?

Mathematics are assessed with 2 written papers:

Core:

Paper 1 – non calculator paper (1 hour 30 minutes – weight 50%)

Paper 3 – calculator paper (1 hour 30 minutes – weight 50%)

Extended:

Paper 2 – non calculator paper (2 hours – weight 50%)

Paper 4- calculator paper (2 hours – weight 50%)

Future Opportunities?

This course is recommended to students who are considering studying Engineering, Sciences, Economics, Management or Mathematics at University.

IGCSE First Language English (Exam Board: Cambridge, Syllabus Code: 0500) is aimed at students whose English is of native, near-native or advanced standard.

Why study IGCSE First Language English?

This course enables students to respond knowledgeably to a rich array of reading passages. They will use some of these passages to inform and inspire their own writing and write in a range of text types for different audiences.

What will I learn?

Students will be encouraged to read widely, both for their own enjoyment and to further their awareness of the ways in which English can be used. They will also develop more general analysis and communication skills such as synthesis, inference, and the ability to order facts and present opinions effectively.

How will I be assessed?

You will take two components: Paper 1 and either Paper 2 or coursework - each counts for 50% of the total mark. All candidates will be eligible for grades A* - G.

Future Opportunities?

These skills are of great importance to anyone hoping to pursue an academic career in an English-speaking environment such as college/university.

IGCSE English Literature (Exam Board: Cambridge, Syllabus Code: 0475) is aimed at students who have shown an ardent interest in the study of literary texts at KS3.

Why study IGCSE English Literature?

Literature from a range of writers and literary traditions is studied, and students are introduced to different literary forms and genres such as drama, prose, and poetry.

What will I learn?

Students will develop an appreciation of the ways in which authors achieve their literary effects. They will also be encouraged to explore, through literature, the cultures of their own and other societies.

How will I be assessed?

You will take three papers: Paper 1 Poetry & Prose (50% of the total mark), Paper 3 Drama (25% of the total mark) and Paper 4 Unseen (25% of the total mark). All candidates will be eligible for grades A* - G.

Future Opportunities?

Through in-depth class discussions where they engage with sophisticated literary concepts, students develop critical thinking skills that are necessary for a plethora of academic options and careers.

GCSE Greek (Exam Board: Edexcel, Syllabus Code: (1GK0)

Why study?

The presence of more than 4 000 000 people of Greek origin in more than 100 countries around the globe proves in the most profound way that Hellenism lives and acts, to a great extent, beyond the Greek borders. Students will study across a variety of contexts relevant to their age and interests and will develop a greater awareness of the culture of Greek-speaking communities and countries as well as transferable language learning skills.

What will I learn?

This course enables students to develop the ability to listen to and understand spoken Greek in a range of contexts and a variety of styles, to communicate in speech for a variety of purposes, to read and respond todifferent types of written language as well as to understand and apply a range of vocabulary and structures.

How will I be assessed?

This course consists of four externally examined papers. Each paper is available at Foundation tier or Higher tier. Students must be entered for a single tier across all papers.

- Paper 1: **Listening and Understanding in Greek**. This paper consists of a written examination:Students will respond to multiple- response and short-answer open-response questions.
- Paper 2: **Speaking in Greek**. This assessment is internally conducted and externally assessed. There are three tasks: a role play; questions based on a picture stimulus; a conversation.
- Paper 3: **Reading and Understanding in Greek**. This paper consists of a written examination. Students are assessed on their understanding of written Greek across a range of texts and are required to respond to multiple-response and short-answer questions based on these texts.
- Paper 4: **Writing in Greek**. This paper consists of a written examination.

What are the entry requirements?

It is strongly recommended that students who wish to study Greek at GCSE level have a strong background in KS3 Greek, equivalent to a CEFR-A2 level.

Pathways

i) GCSE Greek two year course:

Those students who enter the GCSE course with a CEFR A2 level, will complete the course in two years, aiming for the Higher tier.

ii) GCSE Greek three year course:

This pathway refers to the students who started Greek GCSE in Year 9 and aim for the Foundation tier in Year 11.

Further Opportunities?

Studying a foreign language has powerful educational benefits and career and workplace advantages especially in the field of translation or communication with people from non-English speaking countries, tourism, government, politics, media, publishing, journalism and education

Greek - AS and A-Level

Course code: Pearson Edexcel International Advanced Subsidiary Level in Greek (XGK01)
Pearson Edexcel International Advanced Level in Greek (YGK01)

Why study Modern Greek at A-Level?

A-level Greek is a fascinating subject. Students will study a variety of texts from different Greek authors and thus become acquainted with the Greek literary heritage, irrespective of their nationality. They will develop an understanding of literary ideas and strengthen their knowledge in order to cultivate critical thought. The course comprises class discussions, research tasks and essay writing in order to promote learning, while also being an enjoyable and enriching experience.

What will I learn?

The Advanced Subsidiary specification requires students to:

• read and respond to a variety of Greek-language written texts, including authentic sources, covering different contexts, registers, styles and genres
• adapt their written Greek language appropriately for different situations and purposes
• use the Greek language accurately to express facts and ideas, and to present explanations, opinions and information in writing
• understand and apply the grammatical system and a range of structures of the Greek language as detailed in the Greek unit content: Grammar list.

The Advanced Level specification requires students to:

• use the Greek language to present viewpoints, develop arguments, analyse and evaluate in writing
• understand and apply the grammatical system and a range of structures in Greek as detailed in Greek unit content: Grammar list
• study aspects of the contemporary society, cultural background and heritage of one or more of the Greek-language countries or communities
• transfer meaning from English into Greek.

IAL General Topic Areas

Youth culture and concerns, Lifestyle, health and fitness, Environment and travel, Education and employment, Technology in the Greek-speaking world, Society in the Greek-speaking world, Ethics in the Greek-speaking world.

IAL Topics, Texts and Films

History of Greece: 1960-1974, History of Cyprus: 1925-1960, Films and documentaries: Conversations about crisis in Greek society, Society and childhood in Greek cinema, Poetry and Short stories

How will I be assessed?

The Pearson Edexcel International Advanced Subsidiary in Greek and the Pearson Edexcel International Advanced Level in Greek are modular qualifications.

AS is a 2-hour and 30-minute paper in 3 sections, externally assessed. Reading, Grammar, Essay.

A2 is a 3-hour paper in 3 sections, externally assessed. The examination comprises three sections: Section A: Translation; Section B: Creative/Discursive Essay; Section C: Research-based Essay.

What are the entry requirements? Grade B or above in GCSE Greek in Year 9.

Future Opportunities? Literature, Classics, Sociology, Law, Arts, Psychology, Medicine, Life Sciences, Journalism, Translating / Interpreting.

IGCSE Spanish (Exam Board: Edexcel, Syllabus Code: 4SP0)

Why study?

This qualification enables students to develop the ability to communicate effectively in the target language through the written word, using a range of vocabulary and structures and to develop the ability to communicate effectively in the target language through speaking, using a range of vocabulary and structures. In addition, it will help them develop knowledge and understanding of countries and communities where the target language is spoken and a positive attitude towards modern foreign language learning. They will also acquire a suitable foundation for further study of the target language, or another language.

What will I learn?

Students will develop their ability to listen to and understand the spoken Spanish language in a range of contexts and a variety of styles, read and respond to different types of written language, communicate in writing, understand and apply a range of vocabulary and structures They will develop effective language learning and communication skills and communicate in speech for different purposes, develop the ability to listen to and understand the spoken Spanish language in a range of contexts and a variety of styles. They will also read and respond to different types of written language, communicate in writing, understand and apply a range of vocabulary and structures, develop effective language learning and communication skills and communicate in speech for different purposes.

How will I be assessed?

This qualification comprises three external assessments:

- Paper 1 (Listening Assessment- 35 min.),
- Paper 2 (Reading and Writing Assessment - 1h 45min.) and
- Paper 3 (Speaking Assessment: Max. 10 min.). Each paper is targeted at grades 9-1.

What are the requirements?

It is strongly recommended that students who wish to study Spanish at IGCSE level, have a strong background in KS3 Spanish, equivalent to a CEFR-A2 level.

Future opportunities?

Studying a foreign language has powerful educational benefits and career and workplace advantages especially in the field of translation or communication with people from non-English speaking countries, tourism, government, politics, media, publishing, journalism and education. Languages go well with subjects like English Literature, History and Geography as they are closely linked and can inform each other. The Russell Group Universities define MFL as one of the facilitating subjects and some universities, like University College London, require a Modern Foreign Language GCSE for entry across all of its degree programmes. This course provides progression to GCE AS and Advanced GCE level, and other equivalent qualifications.

IGCSE Global Perspectives (Exam Board: Cambridge, Syllabus Code: 0457)

Why study Global Perspectives at IGCSE?

Cambridge IGCSE Global Perspectives is a groundbreaking and stimulating course that stretches across traditional subject boundaries and develops transferable skills. It is both cross-curricular and skills- based and taps into the way learners of today enjoy learning, including teamwork, presentations, projects, and working with other learners around the world. The emphasis is on developing the ability to think critically about a range of global issues where there is always more than one perspective.

What will I learn?

The course will give you a better understanding of the world by looking into global issues and current affairs. You will be able to explore them by researching case studies (e.g. the impact of fake news on society or the actions taken to protect local ecosystems), talking part in class activities (such as debates) and developing awareness of current affairs (watching news, reading newspapers) you will be able to understand different perspectives of an issue from a global, national or local point of view. Students often have the option to choose the topic they want to study which personalises their learning. Over the past few years Global Perspectives students have collaborated with a school in Denmark (including hosting them a few times), interviewed professionals in their field of study, organized and run events on the topics of Human Rights, Inequality, Sustainability and many more.

You will also develop important skills such as:

- The ability to carry out research successfully
- Communication skills needed to support arguments with reasons
- The ability to analyse different perspectives
- Identifying causes and consequences of an issue
- Identifying possible solutions to a problem
- Developing and justifying a line of reasoning
- Collaboration

How will I be assessed?

The course consists of three components: Written Examination (35%), Individual Report (30%) and Team Project (35%). Written Examination is done under exam conditions and it takes 1 hour 25 minutes. Individual Report and Team Project are part of the course work and will be carried out in class under controlled assessment.

Future Opportunities?

Global Perspectives is an excellent foundation for the world of work particularly with related careers in Journalism, History, Archaeology, Geography, Politics, Sociology, Literature, Environmental studies, Law and many others.

IGCSE Business Studies (Exam Board: Edexcel, Syllabus Code: 4BS1)

Why study Business Studies at IGCSE?

The Pearson Edexcel IGCSE Business Studies syllabus develops learners' understanding of business activity in the public and private sectors, and the importance of innovation and change. Learners find out how the major types of business organisation are established, financed, managed and regulated. Factors influencing business decision-making are also considered, as are the essential values of cooperation and interdependence.

You will not only study business concepts and techniques but also related skills such as numeracy and enquiry. The syllabus provides both a foundation for further study at A Level and an ideal preparation for the world of work. The department connects the subject to real-world business visits beyond the classroom, and you will also have the opportunity to develop your practical presentation skills.

What will I learn?

Over the duration of the 2-year course you will study five units: business activity and influences on business, people in business, business finance, marketing, business operations. Section one introduces the nature and types of business in an economy. Students will be encouraged to examine the interaction between businesses and the environment in which they operate. Sections two to five focuses on the main functional areas of business administration, finance, marketing and operations. While the five sections of content are listed as discrete topics, it is important for students to recognise that, because business is dynamic, these five areas interrelate.

You will also development important skills such as:

- the ability to calculate and interpret business data
- communication skills needed to support arguments with reasons
- the ability to analyse business situations and reach decisions or judgements.

How will I be assessed?

All candidates take two components, Paper 1: Investigating small businesses and Paper 2: Investigating large businesses. Each paper has 80 marks with a time of 1 hour 30 minutes and the papers are equally weighted.

- Paper 1 & 2 Structure: consisting of four compulsory questions, each worth 20 marks. The sub-questions are a mixture of multiple-choice, short-answer, data-response and open-ended questions.
- Paper 1 Content: This paper will draw on topics taken from the whole of the subject content. The question scenarios are based on a small business – up to 49 employees.
- Paper 2 Content: This paper will draw on topics taken from the whole of the subject content. The question scenarios are based on a large business – more than 250 employees.

Future Opportunities?

Business Studies is an ideal foundation for further study at A level with its development of numeracy skills and analytical writing techniques. Many students continue studying Business at A level as it is a versatile and engaging course with a host of related degree options for further study. Students often opt to study related A levels such as Economics, History and Mathematics.

Business Studies is an excellent foundation for the world of work particularly with related careers in Finance, Marketing, Management, Consultancy and Accountancy services. Human Resources and Operations Management service

IGCSE History (Exam Board: Pearson Edexcel, Syllabus Code: 4HI1)

Why study History at IGCSE?

History at IGCSE develops highly valued skills including critical thinking, research, and clear communication. Students learn to evaluate evidence, understand different perspectives, and construct well-supported arguments. By studying major events such as revolutions, global conflict, and civil rights movements, History helps students make sense of the modern world and better understand society, culture, and human behaviour. It is an engaging subject that brings the past to life and encourages curiosity, debate, and independent thought.

What will I learn?

IGCSE History explores how conflict, power, ideology, and change have shaped the twentieth century. Students examine how individuals, governments, and societies responded to war, revolution, and political upheaval, while developing an understanding of cause and consequence, change and continuity, and historical interpretation. The course builds strong skills in analysing sources, weighing evidence, and presenting clear, persuasive arguments.

Topics studied include:

- Russia and the Soviet Union, 1905–24
- Dictatorship and conflict in the USSR, 1924–53
- A world divided: superpower relations, 1943–72
- China: conflict, crisis and change, 1900–89

How will I be assessed?

The qualification is assessed through two externally examined papers:

Paper 1: Depth Studies (50%)

Two questions on chosen depth study topics.

1 hour 30 minutes.

Paper 2: Investigation and Breadth Studies (50%)

One investigation question and one breadth study question.

1 hour 30 minutes.

Both papers assess knowledge, source analysis, and the ability to explain and evaluate historical events and interpretations.

Future Opportunities?

History is highly respected by universities and employers as it demonstrates intellectual rigour, analytical thinking, and strong communication skills. It supports a wide range of future pathways, including law, journalism, business, politics, education, public services, and heritage-related careers. Whether students continue into further study or employment, History provides a strong and versatile foundation.

IGCSE Economics (Exam Board: Edexcel, Syllabus Code: 4EC1)

Why study Economics at IGCSE?

When students understand how markets and economies work, they develop an economic awareness to benefit them personally and professionally for years to come. The aim is to increase students' understanding of the world in which they live and enable them to engage more effectively with current and historical economic issues on a local, national and global level. As an international school, this is of utmost importance, as students prepare to become global leaders of tomorrow. The IGCSE syllabus lays the foundation for successful progression to A level Economics, a challenging and rewarding subject that prepares students for university and their future career.

What will I learn?

Throughout the two-year course you will develop an understanding of economic concepts and apply these concepts to real-life situations. This knowledge will help you make sense of the world around you, especially current affairs. You will learn how wealth is created by individuals, companies, and countries and how this shapes the face of the globe.

The course is divided into two units, microeconomics, and macroeconomics. Micro deals with businesses and how they operate in markets, how these firms make profit and how they compete against each other. Whereas macro deals with the economy as whole, be it countries or the world economy, and how different decisions dynamically change the standard of living for billions of people.

The subject fosters in students an awareness of economic change and its impact on developing and developed economies and helps students to understand economic issues, problems and possible solutions that affect mixed economies across the world. It provides skills that are valuable to everyday life and especially students' future in order to participate effectively in society as citizens, producers and consumers. Additionally the course provides skills such as the ability to calculate, interpret and evaluate economic data in order to make reasoned arguments and informed judgements

How will I be assessed?

Paper 1: *Microeconomics and Business Economics*

The market system: the economic problem, economic assumptions. Business economics: production, productivity and division of labour, business costs, revenues and profit, business competition.

Paper 2: *Macroeconomics and the Global Economy.*

Government and the economy: Macroeconomic objectives, government policies, relationships between objectives and policies. The global economy: globalisation, international trade, exchange rates

Future Opportunities?

Economics is an ideal foundation for further study at A level with its development of numeracy skills and analytical writing techniques. Many students continue studying Economics at A level as it is a versatile and engaging course with a host of related degree options for further study.

Future careers where an economics degree is necessary or useful are banking and finance, investment analyst, stockbroker, economist at a large institution, financial risk analyst, business development analyst, politician, data scientist, positions in international institutions like the World Bank, United Nations and International Monetary Fund and of course, an economics teacher.

IGCSE Geography (Exam Board: Edexcel, Syllabus Code: 4GE1)

Why study Geography at IGCSE?

This qualification helps students understand how the world works by linking people, places and environments. It develops both scientific and human perspectives, combining data analysis, fieldwork and critical thinking. It equips students with transferable skills valued by universities and employers, while encouraging global awareness, adaptability and informed decision-making in an increasingly interconnected world.

The content and assessment approach for this qualification has been designed to meet students' needs in the following ways:

Two-paper assessment - this allows students to focus on physical and human geography; concepts, content and integrated fieldwork. The content builds understanding and awareness of a range of geographical concepts and skills, including localised and international case studies, with regular opportunities for assessing and evaluating real life situations.

What will I learn?

Paper 1- Physical geography

- Coastal environments
- Hazardous environments, including hazardous environments fieldwork.

Paper 2 - Human geography

- Economic activity and energy
- Urban environments, including urban fieldwork
- Fragile environments and climate change.

How will I be assessed?

Paper 1: Examination length: 1 hour and 10 minutes. The examination paper is in two sections.

Section A- coastal and hazardous environments (50 marks).

Section B- hazardous environments fieldwork (20 marks). The total marks awarded for paper 1 is 70 marks.

Paper 2: Examination length: 1 hour and 45 minutes. The examination paper is in three sections. Section A- economic activity and energy, and urban environments (50 marks).

Section B- Urban fieldwork knowledge (20 marks).

Section C- Fragile Environments and Climate change (35 marks). The total marks awarded for paper 2 is 105 marks.

Future opportunities?

IGCSE Geography can lead to AS and/or A Level Geography, closing relating with Business, Economics and Science. Studying geography opens the door to a wide range of exciting and practical careers by developing strong analytical, research and problem-solving skills. Geographers work in fields such as environmental management, urban planning, international development, disaster risk reduction, GIS and mapping, business, law, journalism and education, to name a few. With a strong global focus, Geography is particularly valuable for students interested in sustainability, climate change, travel, international relations and careers that address real-world challenges.

The **Cambridge IGCSE Biology / Chemistry / Physics (Core and Extended)** syllabi help learners to understand the technological world in which they live and take an informed interest in science and scientific developments. Learners gain an understanding of the basic principles of each particular science through a mix of theoretical and practical studies. They also develop an understanding of the scientific skills essential for further study at A Level, which are useful in everyday life.

As they progress, learners understand how science is studied and practiced, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

In all three sciences students sit three exams in Year 11 at the end of the two-year course. Candidates who have studied the core curriculum can obtain a maximum of Grade C; while students who have studied the extended curriculum sit different theory papers and can attain Grades A* to E.
It is strongly recommended that students who wish to study any science at IGCSE level, have a strong background in KS3 science and possess an inquiring scientific mind.

IGCSE Biology (Exam Board: Cambridge, Syllabus Code: 0610)

Why study Biology at IGCSE Level?

The aim of the Cambridge IGCSE in Biology is to:

- Develop enthusiasm for the subject and build further on past knowledge.
- Develop deeper understanding of different areas of the subject and relate between them.
- Encourage critical thinking by combining ideas across the curriculum and with other sciences.

What will I learn?

Biology is the study of life, including topics such as disease, genetics, biotechnology, and human, plant and environmental biology. Students have the opportunity to relate what they learn to what is happening around them, such as new cures for disease (as well as their outbreaks), applications of genetic engineering and stem cells, and various health and environmental issues that dominate the headlines.

How will I be assessed?

Biology is assessed in terms of three written papers:
Core:
Paper 1 Multiple Choice (45 minutes - weight 30%) Paper 3 Theory (1 hour 15 minutes – weight 50%) Paper 6 Alternative to Practical (1 hour – weight 20%)
Extended:
Paper 2 Multiple Choice (45 minutes – weight 30%) Paper 4 Theory (1 hour 15 minutes – weight 50%) Paper 6 Alternative to Practical (1 hour – weight 20%)

Future Opportunities?

Biology is essential to anyone planning to study medicine, veterinary science, dentistry, physiotherapy or any health science at third level.
One of the aims of the course is to develop abilities and skills that are not only relevant to the study and practice of Biology, but which are also useful in everyday life. The course complements IGCSE Geography, PE and Chemistry.

IGCSE Physics (Exam Board: Cambridge, Syllabus Code: 0625)

Why study Physics at IGCSE Level?

Studying physics at IGCSE Level will enable learners to:

- Have an enjoyable and worthwhile educational experience for all learners, whether or not they go on to study physics beyond this level.
- Better understand the technological world, with an informed interest in scientific matters
- Develop attitudes relevant to physics such as objectivity, enquiry and inventiveness.
- Acquire sufficient knowledge and understanding to become confident citizens in a technological world and develop an informed interest in scientific matters
- Be suitably prepared for studies beyond IGCSE

What will I learn?

Learners will develop an understanding of scientific phenomena, facts, laws, definitions, concepts and theories. They will also develop their experimental skills and their problem-solving ability. Specifically, in the first year we study the topics mechanics, thermal physics and electricity. During the second year the topics taught are electromagnetism, waves and atomic physics.

How will I be assessed?

Physics is assessed in terms of three written papers:

Core:

Paper 1 Multiple Choice (45 minutes - weight 30%) Paper 3 Theory (1 hour 15 minutes – weight 50%) Paper 6 Alternative to Practical (1 hour – weight 20%)

Extended:

Paper 2 Multiple Choice (45 minutes – weight 30%) Paper 4 Theory (1 hour 15 minutes – weight 50%) Paper 6 Alternative to Practical (1 hour – weight 20%)

Future opportunities?

Physics is an essential subject not only to those who want to study Physics at a higher level, but also to those who wish to study Electrical-, Electronic-, Computer-, Mechanical- and Civil- Engineering, and in general any technology oriented degree

IGCSE Chemistry (Exam Board: Cambridge, Syllabus Code: 0620)

Why study Chemistry at IGCSE Level?

The aims of the Cambridge IGCSE in Chemistry are to encourage students to:

- Develop enthusiasm for Chemistry, building further on the knowledge that has been acquired in KS3.
- Develop deeper understanding of different areas of the subject, such as inorganic and organic chemistry and become able to relate between them.
- Become aware of the contribution of chemistry in modern society and stimulate awareness on environmental issues.
- Encourage critical thinking by combining ideas across the curriculum and with other sciences. Induce interest in further study of Chemistry at A-level.

What will I learn?

In the first year we study some basic concepts of inorganic and physical chemistry and then during the second year we concentrate more on certain aspects of organic chemistry, links between the different areas of the subject and we allow plenty of time for past paper practice. The Cambridge IGCSE in Chemistry compliments the other sciences and promotes some essential critical thinking skills which are required for further studies at A-level.

How will I be assessed?

Chemistry is assessed in terms of three written papers:

Core:

Paper 1 Multiple Choice (45 minutes - weight 30%) Paper 3 Theory (1 hour 15 minutes – weight 50%)

Paper 6 Alternative to Practical (1 hour – weight 20%)

Extended:

Paper 2 Multiple Choice (45 minutes – weight 30%) Paper 4 Theory (1 hour 15 minutes – weight 50%) Paper 6 Alternative to Practical (1 hour – weight 20%)

Future Opportunities?

The Cambridge IGCSE in Chemistry is addressed to students with a genuine interest in science, who consider pursuing further studies in the field of sciences at University. Particularly, in the fields of Chemistry, Environmental Science, Dentistry, Medicine, Veterinary Medicine, Sports Science, Forensic Science, Engineering, etc.

The Cambridge IGCSE in Chemistry is also a valuable option for students who wish to study a balanced set of IGCSEs

IGCSE Science - (Single Award) (Exam Board: Pearson Edexcel, Syllabus Code: 4SS0)

The International GCSE Science (Single Award) is offered to students entering Year 10 who wish to study Biology, Chemistry and Physics within a single, integrated qualification. The course leads to one overall GCSE grade and provides a broad and balanced foundation in science.

Why study Science (Single Award) at International GCSE Level?

The Pearson Edexcel International GCSE Science (Single Award) aims to encourage students to:

- develop knowledge and understanding of key scientific ideas, techniques and procedures
- learn how science is investigated, tested and applied
- understand that scientific developments can have positive and negative impacts on individuals, society and the environment
- develop essential problem-solving, analytical and critical-thinking skills
- take an informed interest in the scientific and technological world

What will I learn?

The course is divided into three disciplines, each taught in clearly defined sections.

Biology

Students will study topics including:

Cells and control, Genetics, Natural selection and genetic modification, Health and disease, Development of medicines, Plant structures and their functions, Animal coordination, control and homeostasis, Ecosystems and material cycles.

Chemistry

Students will study topics including: Principles of chemistry, Inorganic chemistry, Physical chemistry, Organic chemistry, Energy changes in chemical reactions, Rates of reaction, Acids, bases and salts, The Periodic Table, Fuels and Earth science.

Physics

Students will study topics including: Forces and motion, Electricity, Waves, Energy resources and energy transfer, Solids, liquids and gases, Magnetism and electromagnetism, Radioactivity and astronomy.

The course promotes scientific literacy and encourages students to apply their knowledge to real-world contexts.

How will I be assessed?

The International GCSE Science (Single Award) is assessed through two written examination papers, which include questions based on practical investigations, test knowledge, understanding and scientific skills, and do not require a separate practical examination

Future Opportunities

The International GCSE Science (Single Award) is a valuable option for students seeking a broad and balanced science qualification. It provides a strong foundation for further study and is particularly suitable for students who do not intend to study Biology, Chemistry or Physics as separate subjects at A Level, but who wish to maintain scientific understanding as part of their overall academic profile.

IGCSE Computer Science (Exam Board: Cambridge, Syllabus Code: 0478)

Why study Computer Science at IGCSE level?

IGCSE Computer Science learners study the principles and practices of computing and gain confidence in computational thinking and programming. They learn to program by writing computer code and they develop their understanding of the main principles of problem-solving using computers.

What will I learn?

The aims are to develop:

- computational thinking, that is thinking about what can be computed and how, and includes consideration of the data required
- understanding of the main principles of solving problems by using computers
- understanding that every computer system is made up of sub-systems, which in turn consist of further sub-systems
- understanding of the component parts of computer systems and how they interrelate, including software, data, hardware, communications and people
- skills necessary to apply understanding to solve computer-based problems using a high-level programming language.

How will I be assessed?

The Scheme of the Assessment is as follows: Paper 1: Theory (60% of total marks) Paper 2: Problem-solving and Programming (40% of total marks)

Future opportunities?

Cambridge IGCSE Computer Science is an ideal foundation for further study in Computer Science. Understanding the principles of Computer Science provides learners with the underpinning knowledge required for many other subjects in science and engineering, and the skills learnt can also be used in everyday life.

IGCSE Additional Mathematics (Exam Board: Cambridge, Syllabus Code: 0606)

This course is intended for high ability learners who are likely to achieve grade A*, A or B in the IGCSE Mathematics examination.

Why study Additional Mathematics at IGCSE Level?

Cambridge IGCSE Additional Mathematics syllabus aims to mature a pupil's overall approach to mathematics, to give depth to their understanding of the mathematical foundations of other IGCSE courses, such as Mathematics, Science and Computer Science, so as to better prepare them to handle the demands of the "Standard" A-level Mathematics course and the A-level *Further Mathematics* course.

What will I learn?

The Cambridge IGCSE in Additional Mathematics programme of study aims to consolidate and extend a pupil's mathematical skills allowing them to better appreciate the interconnectedness of mathematical knowledge and help them understand certain mathematical theories in more depth. The programme of study includes topics that are part of the "Standard" AS/A-level Mathematics course, giving students a preview of AS/A-level study that helps to mature their mathematics skills over a two-year period before starting their AS/A-level studies. However, the aim of the Additional Mathematics programme of study is not to merely introduce "A-level" topics to an earlier age group, but rather, it is to train students to apply their mathematical skills in problem solving contexts that are a significant step beyond that which the Extended Mathematics course exposes them to.

How will I be assessed?

The Cambridge IGCSE in Additional Mathematics requires students to sit two equally weighted two-hour examination papers at the end of year-11, a non-calculator and a calculator paper. Students can obtain Grades A* to E.

Future Opportunities?

Students who study the Additional Mathematics course are significantly better prepared to study courses at A-level that have mathematical content. They may be considering study the A-level in Further Mathematics. Such students then tend to excel in their studies in Engineering, Sciences, Economics, Management or Mathematics at University.

GCSE (9-1) Physical Education (Exam Board: Edexcel, Syllabus Code: Level 1/Level 2 GCSE (9 - 1) in Physical Education (1PE0)

Why study Physical Education GCSE?

Physical Education is the right subject for you if you enjoy:

- learning about the world of Sport and Physical Education
- keeping up to date with sporting issues
- performing and developing your own practical performances
- communicating and explaining your ideas
- independent thinking, reflective learning and problem solving

What will I learn?

- factors that impact physical activity & sport and how to use them to improve performance
- how physiological & psychological state affects performance in physical activity & sport
- how to analyse and evaluate data to improve performance in physical activity and sport
- how physical activity and sport contribute to health, fitness and wellbeing
- how socio-cultural influences can affect people's involvement in physical activity and sport

How is the course structured?

The course consists of four components:

- 1 – physiological and biomechanical workings of the body and explore how to apply this to your physical training
- 2 – the link between health and performance and explore the contribution that physical activity and sport make to health, fitness and well-being
- 3 - practical performance skills in three different physical activities. You must perform in a team game, an individual activity, then either another team or individual activity.
- 4 - a written piece of coursework, which requires you to: complete and analyse fitness tests; record statistics during a sport of your choice and analyse the impact on performance; use the data to plan and complete a fitness programme to improve performance; evaluate the effectiveness of your fitness programme by comparing data.

How will I be assessed?

• **Paper 1** You will tackle multiple-choice, short answer and extended writing questions on the body systems and physical fitness –this is the content you study in Component 1

• **Paper 2** You will tackle multiple-choice, short answer and extended writing questions on the link between health and performance –this is the content you study in Component 2

You will be also assessed in the practical performance of your three chosen sports and your Personal Exercise Programme (PEP). This work will also be externally moderated -this is the content you study in Component 3 and 4.

Future Opportunities?

GCSE PE prepares you for further study or the world of work:

- transferable skills, including numeracy, communication and practical performances
- a mix of scientific and social knowledge putting you in an excellent position to access a wide range of sport and non-sport related courses
- knowledge, skills and understanding to prepare you for a career in this dynamic employment sector
- skills to take to a wider range of careers from management, public sector organisations, businesses and charities, as well as the potential for self-employment

GCSE (9-1) Art and Design (Exam Board: Edexcel, Syllabus Code: 1FA0)

Why study Art and Design at GCSE?

Art and Design equips students with the skills to enjoy, produce and engage with the visual arts throughout their lives. It allows to students to explore both contemporary and historical sources of art by engaging practically and contextually with different styles and art movements, develop their own visual style, develop the skills of selecting their best and most appropriate work for presentation and prepare for a career in the arts and the wider creative fields.

What will I learn?

At Byron College, we offer the GCSE Art and Design under the 'Art, Craft and Design' title to accommodate for as many different interests, technical skills and inclinations. Students can develop work using a variety of art forms such as drawing, installation, lens-/light-based media, mixed-media, digital media or applications, Land Art, printing, painting, sculpture and combinations of these areas of study.

Students will develop practical knowledge and understanding of how sources inspire the development of ideas, the use of observational skills to record from sources and communicate ideas, the use of formal elements (*line, tone, shape, form, scale, colour, texture, pattern*) and visual communication through a variety of approaches the characteristics, properties and effects of using different media, materials, techniques and processes.

How will I be assessed?

Component 1: Personal Portfolio that accounts for 60% of your total grade

Component 2: Externally Set Assignment that accounts for 40% of your total grade and includes an exam for which you are asked to produce a final artwork during a 10-hour exam period

Future Opportunities?

You may continue to the A-Level in Art & Design course which can lead you to a wide range of careers in the Art and Design fields. You may wish to study for a university BA degree in Fine Art, Architecture, Art History, Photography, Textiles, Illustration, Visual Culture, Social Anthropology, Film and Design. Design includes an extensive range of evolving fields such as Graphic Design, Product & Furniture Design, Interior Design, Fashion Design, Stage Design, Games Design, Jewellery Design, Ethical Design. You may also use your Art & Design studies to strengthen your creative skills and thinking if you would like to study or work for the wider creative industries such as Advertising, Public Relations, Media & Communication, Arts Journalism, Marketing, Branding & Identity, Fashion Marketing, Fashion Buying & Merchandising, Virtual Reality, Music & Sound Arts, Contemporary Theatre & Performance etc.

The study of art can also help you develop transferable skills that you can take into various careers or jobs At Byron, you may gain experience by entering art competitions, taking part in the organisation of art exhibitions, productions and school events or simply by creating art projects with your friends to exhibit at school

IGCSE Drama (Exam Board: Cambridge, Syllabus Code: 0411)

Why Study Drama at IGSCE?

IGCSE Drama has a written and practical component. Students gain confidence through performing and refining their practical skills in addition to supporting the study of English by the inclusion of textual analysis in the curriculum. The study of Drama supports progression in all fields as students gain essential interpersonal skills, creative problem-solving skills as well as developing personal performance for those who wish to progress to careers in the Performing Arts.

The IGCSE Syllabus engages with many other academic disciplines and helps students to make links between practice and theory. For example, the practical application of Maths and Science in set design, researching the historical, social, cultural and political context in which plays were written and using other Arts practices such as fine Art and music to enhance performance.

What will I learn?

Over the duration of the two-year course, you will explore and develop an understanding of

- the elements of practical drama
- how to work with extracts from published plays as an actor, director and designer
- how to devise, develop and structure your own original dramatic material from stimuli such as short titles, poems, pictures, songs, historical events and stories
- how to evaluate your contribution to the devising process and the success of the final piece
- how to use staging and design as part of a dramatic performance
- individual and group performance skills and how they are applied to create character and communicate meaning to an audience.

How will I be assessed?

All candidates will undertake two components:

Component 1-Externally Assessed: (40%) Written Exam 2hours 30 mins

Students will answer questions on a play extract that is pre-released prior to the exam and studied in class.

Component 2: (60%) Coursework

Students submit three pieces of practical work to include: an individual performance based on a play extract, a group performance based on a play extract, a group performance based on an original devised piece.

Future Opportunities?

Drama develops key skills that are essential for the further study of any Performance Art. Increasingly, Drama is studied not only by students who have an interest in Performing Arts but also by students who will need a high level of interpersonal skills for their chosen career paths e.g., Medicine, Teaching, Law and management positions in all fields.