

**2021-2022**

**BISM GEMS**  
British International School  
Madinaty

**OPTIONS BOOKLET**  
**Year 11**



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## INTRODUCTION

Welcome to **The British International School Madinaty's (GEMS BISM)** options process for Year 11. This is an important time for you as this is the time you will choose, your A- level option choices. This decision will determine your university course choice as well as affect your future career paths.

At BISM, we offer you a range of AS and A2 level options for Years 11 and 12. We believe our Key Stage 5 programme is one of the most exciting and adaptable systems available. It mirrors perfectly our intention to offer an appropriate curriculum for all students to ensure they reach their university goals in Egypt or anywhere in the world. By the end of Year 10, you will have completed your IGCSE's in English, Mathematics and two or three of the science subjects

During Year 11, you will continue to study the remaining three or four chosen IGCSE options, for which you will sit for external examinations at the end of Year 11. Along with your chosen IGCSE subjects, you may then choose up to 3 AS levels.

During Year 12 you will have a choice to either continue to study your AS subject to the higher A2 level or decide to take more AS choices. You may even decide that you would like to take a mixture of both AS and A2.

We will guide you to help you make the right options choices for you. There is an Options Evening where you will be able to attend with your parents to ask more questions about option subjects and examination requirements for university. After all students will have a scheduled individual counselling session and receive a copy of the options booklet. In addition, take the time to talk to the teachers who run the various courses to make sure you are making the right choices.

When choosing subjects, think about you, your strengths and the paths you may want to take in your future career; don't base your choices on what your friends are doing or which teachers you like. Take advice from your parents and from your teachers – but at the end of the day, the decision must be yours. You are going to have to work hard at you're A-levels for the next two years. If you are unsure about any part of this process, please talk to your Form Tutor or the Assistant Heads, or come and see me. You can also get advice from our examinations officer.

Samantha Daisley  
Head of Secondary

## KEY DATES

Options Evening at BISM	Monday 7 <sup>th</sup> December 2020 at 5:00 pm
Initial Option Form Deadline	Wednesday 9 <sup>th</sup> December 2020
Student Academic Counselling Sessions	Wednesday 9 <sup>th</sup> December 2020
Final Confirmation of Options Deadline	Sunday 13 <sup>th</sup> December 2020

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## CHOOSING OPTIONS – KEY CONSIDERATIONS

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### A. Quantity

All students will study for a minimum of 8 IGCSEs during Key Stage 4 and 5 including English Language and Mathematics. 5 IGCSE's subjects will have been completed in Year 10 and the remaining 3 will be completed and examined in Year 11.

### B. A Balanced Curriculum

It is a good idea to ensure that your choices are broad and balanced – even if you have a specific career in mind. You may change your mind over the next few years. Keeping your curriculum broad ensures that you keep as many doors as possible open. It also shows that you are a well-rounded person. Consider taking a subject that you really enjoy even if it isn't something that you think will be relevant to your career.

### C. Dos and Don'ts for Students

#### When Choosing Subjects DO:

- Take your time. Making hurried choices could mean making the wrong choices.
- Think about which subjects you are good at
- Do you enjoy the subject? If you enjoy it, you are more likely to work hard and gain good grades
- Think ahead, see the section below.

#### But DON'T:

- Worry about your choices. There is lots of advice on offer. Make sure you talk to your Form Tutor, the Assistant Heads, the teachers for the subjects or myself.
- Choose a subject because your friends are choosing it. They may be more suited to a subject than you – and you will probably end up in a different class to them anyway.
- Choose a subject because you like the teacher. You may not get that teacher for your class.

## **D. Thinking Ahead**

The choices you make now could affect your university choice, the country of study and even your career. You need to make sure that you keep as many doors open as possible. This means that you need to think ahead:

Most A-levels will require you to have studied the IGCSE in that subject and obtained a pass of 6 or above. For example, to study A-level Mathematics you need to obtain at least a level 6 IGCSE. However, there are some where more than one prerequisite is recommended

AS - Subject	Prerequisite	Grade for the prerequisite
Chemistry	IGCSE Chemistry	Level 6 or above
	IGCSE Mathematics	Level 6 or above
Physics	IGCSE English	Level 6 or above
	IGCSE Mathematics	Level 6 or above
Biology	IGCSE English Language	Level 6 or above
	IGCSE Mathematics	Level 6 or above
	IGCSE Biology	Level 6 or above
Mathematics	IGCSE Mathematics	Level 6 or above

## **E. Making the Wrong Choice**

It is important that you think carefully about your A-level choices, as it is often these choices that decide what university courses are available to you. Every year, some students realise that they have chosen subjects for the wrong reasons. Whilst we will try our best to accommodate any requests for change, this may not always be possible. Any requests for change after the course has started will be considered on a case by case situation and will normally be denied after the course has been running for 2 weeks or more.

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## **WHAT CAN I CHOOSE?**

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The IGCSE choices you made in Year 10 will remain. However, you may choose to take more IGCSE courses. The new IGCSE program will allow you to complete these within a year. During Year 11 you may also choose to take up to 3 AS- courses. During Year 12 you may choose between either continuing with AS level or taking the A2 of a previously studied AS - Level course.

IGCSE and AS Options available in Year 11 (2021-2022)	AS and A2 Possible Options available in Year 12 (2022-2023)
<p> <b>Biology – IGCSE</b>  <b>Business - IGCSE</b>  <b>Chemistry - IGCSE</b>  <b>Computer science – IGCSE</b>  <b>French - IGCSE</b>  <b>ICT - IGCSE</b>  <b>Physics - IGCSE</b>  <b>Travel and Tourism – IGCSE</b> </p> <p> <b>Biology – AS</b>  <b>Chemistry – AS</b>  <b>Physics – AS</b>  <b>Mathematics - AS</b> </p>	<p> <b>Biology - AS</b>  <b>Business - AS</b>  <b>Chemistry - AS</b>  <b>Computer Science - AS</b>  <b>French - AS</b>  <b>ICT - AS</b>  <b>Physics - AS</b>  <b>Sociology - AS</b>  <b>Travel and Tourism - AS</b>  <b>Geography - AS</b>  <b>History - AS</b>  <b>Economics - AS</b>  <b>Accounting - AS</b>  <b>Art and Design - AS</b>  <b>Arabic First language - AS</b>  <b>English Literature – AS</b> </p> <p> <b>Biology – A2</b>  <b>Chemistry – A2</b>  <b>Physics – A2</b>  <b>Mathematics – A2</b> </p> <p>           *More IGCSE subject options may be taken in Year 12 if required.         </p>

\*Please note Options offered are subject to change according to actual student numbers.

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# **IGCSE SUBJECT Options**

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**2021 - 2022**

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## **Course Title: Biology - IGCSE**

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**Examining Board:** Cambridge International Examinations

**Syllabus:** 0970

### **Aim of Course**

To introduce students to a broad based study of Biology. This course is a stand alone IGCSE and also serves as a useful precursor to both AS and A2 Biology. Even if you do not study Biology further, you will be learning more about human and plant biology and the issues being debated in Society.

### **How will the subject be taught?**

The subject will be taught via a combination of teaching sessions, practical work, research-based homeworks and consolidation questions based on the subject content of the lessons.

### **Does the course involve coursework and what does it consist of?**

The Edexcel course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

Access to a computer for web-based exercises is required. If no access is available at home students will be expected to use school computers at break times. A person who would enjoy Biology would be very interested in living things, how they work and enjoy debating about the ethics of developments in medicine and agriculture. They should also be willing to learn lots of definitions and write detailed descriptions.

### **What is the scheme of assessment for this subject?**

Three examination papers are externally assessed at the end of the course.

- Paper 2 is Multiple Choice (30%).
- Paper 4 Extended answers (50%) testing you on your ability to explain Biological processes.
- You will also be tested on practical work in a written alternative to practical paper (20%).

### **Why you should study Biology – IGCSE**

As well as the traditional careers, Biology is an exciting and ever-changing Science. Advances in Genetics, Medicine and Food Production have made Biology a lucrative subject for future careers. These issues are controversial and can affect peoples lives. Students need to learn more about them to make informed decisions as to what should and should not be supported.



Students will also learn transferable skills which can be used in other subjects such as communication skills, manipulating apparatus, research skills and planning investigations, processing and interpreting data. Isn't it fun to learn more about how your body works?

**What career opportunities could studying this course lead to?**

- Sports Scientist
- Food Scientist
- Researcher
- Social Worker
- Agriculture
- Archeology or Anthropology
- Botanist
- Teacher
- Biologist
- Zoologist
- Pharmacist
- Doctor
- Pharmacologist
- Environmental Scientist
- Biomedical Engineer
- Microbiologist
- Dentist
- Physical Therapist

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## **Course Title: Business Studies - IGCSE**

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**Examining Board:** Cambridge International Examination.

**Syllabus:** 0986

### **Aim of Course**

The aim of the course is to help students develop an awareness of the increasing importance of the Business world and how business impacts on our daily lives. Students will need to apply this knowledge to a range of current issues, developing a critical understanding of the factors that regulate businesses across the globe. Students will develop knowledge and understanding of how the main types of business and commercial institutions are organised, financed and operated and explore their relations with other organisations, consumers, employees, owners and society at large.

### **How will the subject be taught?**

The subject will be taught as a combination of theory and practical lessons and opportunities for students to apply theory in which students will utilise the taught content to evaluate a variety of business situations in the form of Case studies.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

Students will use a variety of skills, developed throughout their schooling, in this course. They must have a decent grasp of literacy, numeracy and ICT in order to be able to access and understand a variety of new concepts and terminology.

### **What is the scheme of assessment for this subject?**

The course involves two written exams which are equally weighted.

**Paper One:** 1 hour 30 minutes, 80 marks. Written examination consisting of four questions requiring a mixture of short answers and structured data responses.

**Paper Two:** 1 hour 30 minutes, 80 marks. Written examination consisting of four questions based on a case study, provided as an Insert with the paper.

### **Why you should study Business Studies – IGCSE**

An understanding of business is an obvious advantage with the increasing globalisation of all aspects of life in modern society. Regardless of whether students choose to take this further and develop their skills at AS or A2 level, the knowledge gained at IGCSE will open their eyes



to the world around them and enable them to make informed choices regarding so many decisions that will impact upon their lives: from a choice of college or university, to wider job and career choices including setting up their own business in the future.

Students will learn to make informed judgements on a variety of issues, based upon sound business sense, and will hopefully be able to apply such skills to all aspects of their lives. Students will further apply their knowledge and critical understanding to current issues and problems in a wide range of appropriate contexts leading to a greater knowledge of the world at large.

### **What career opportunities could studying this course lead to?**

- Marketing
- Entrepreneur
- Stock Broker
- Analyst
- Teacher
- Banker
- Finance Officer
- Customer Service Manager
- Recruitment Consultant
- Stock Market Broker
- International Business Owner
- Marketing Manager
- Financial Analyst
- Business Entrepreneur
- Advertising Account Planner



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## **Course Title: Chemistry - IGCSE**

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**Examining Board:** Cambridge International Examinations

**Syllabus:** 0971

### **Aim of Course**

To develop skills and abilities relevant to the study and practice of Chemistry; to encourage efficient and safe practice in the laboratory; to stimulate interest in, and care for, the environment; to become confident citizens in a rapidly growing technological world.

### **How will the subject be taught?**

Teacher-led theory lessons; on-going practical and experimental work together with twice termly tests. Opportunities to use ICT skills.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

A person who would enjoy Chemistry would enjoy learning about new materials and looking for patterns in chemical behaviour. They should be able to perform some simple calculations and to learn a few formulae and facts and then apply them to new contexts.

### **What is the scheme of assessment for this subject?**

Three examination papers are externally assessed at the end of the course.

- Paper 2 is Multiple Choice (30%).
- Paper 4 Extended answers (50%) testing you on your ability to explain Biological processes.
- You will also be tested on practical work in a written alternative to practical paper (20%).

### **Why you should study Chemistry - IGCSE**

Chemistry is about making molecules combine under a variety of conditions and about pushing forward chemical technology. It is about finding out the optimum conditions necessary to get a reaction to proceed in the way we want it to (not always possible!) It is about applying knowledge to many industrial processes such that lives are improved and this ranges from pharmaceuticals to agriculture in Third World countries. If you want to be part of this in your future then study Chemistry. Even if you do not study Chemistry further, Chemistry is great for business. You learn a lot of transferable skills and knowing about Chemistry will help you understand manufacturing processes.



## What career opportunities could studying this course lead to?

- Chemical Engineer
- Doctor
- Pharmacist
- Dentist
- Archeologist
- Forensic Scientist
- Polymer Chemist
- Patent attorney
- Chemist
- Earth scientist
- Nanotechnologist
- Paint and dye Technologist



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## **Course Title:** Computer Science – IGCSE

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**Examining Board:** Cambridge International Examinations

**Syllabus:** 0984

### **Aim of Course**

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

### **How will the subject be taught?**

The subject is taught in the ICT Computer Room and is a largely practical based subject where students spend a good deal of time developing programmes and software. Theory is related to the practical work and students will be expected to produce work using IT packages. Much of this course requires work to be done at home.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

Students will require access to computers outside of school hours. We recommend that students have Microsoft Office including Access and Front page on their own computer. Students will need access to a programming language but this will be available via the Internet or from school.

### **What is the scheme of assessment for this subject?**

At the end of the course students sit two examinations normally in June.

Paper 1: is a theory paper worth 60%. The exam is 1 hour 45 minutes long.

Paper 2: is the programming paper worth 40%. The exam is 1 hour 45 minutes long.

Prior to the examinations pre-lease material is available which is related to the Programming paper.



## **Why should you study Computer Science – IGCSE?**

Students 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.

Students apply their understanding to develop computer-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 computing solutions.

This qualification helps students appreciate current and emerging computing technologies and the benefits of their use. They learn to recognise the ethical issues and potential risks when using computers.

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.

## **What career opportunities could studying this course lead to?**

- Programmer
- Software Engineer
- Systems Analyst
- Web Developer
- Database Developer
- Software Developer
- E-learning Developer
- Robotics Engineer
- App Developer
- Web Content Manager



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## **Course Title: French –IGCSE**

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**Examining Board:** Cambridge International Examinations

**Syllabus:** 7156

### **Aim of Course**

The course allows students to develop an understanding of French in a range of contexts. It teaches the ability to communicate effectively in French using a range of vocabulary and structures. It also aims to develop students' knowledge of French speaking countries and communities.

### **How will the subject be taught?**

Students will be required to practise all four skills in lessons: listening, speaking, reading and writing. During the course students will become familiar more authentic texts and learn structures that will give them the ability to speak and write more creatively. They will take part in dialogues and conversations in lessons as well as practise listening skills.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

It is recommended that students have studied French at Key Stage 3 but the French Department welcomes students from various backgrounds. Students coming from a non-British education system are required to take an assessment.

### **What is the scheme of assessment for this subject?**

The IGCSE consists of four papers:

Paper 1 : Listening – 45 minutes (25%).

Paper 2: Reading – 1 hour (25%).

Paper 3: Speaking – 15 minutes (25%).

Paper 4: Writing – 1 hour (25%).

Assessment consists of four externally examined papers. Examinations are taken at the end of the year. The use of dictionaries is not permitted.





## **Why you should study French – IGCSE**

French is considered a strong academic subject by top UK universities. This is because language learning requires commitment, hard work and motivation.

Learning French will help students' language knowledge and proficiency and open new opportunities for future careers. It improves students oral and communication skills. Becoming proficient in an additional language is regarded as a valuable asset and expands both the mind and future career prospects.

## **What career opportunities could studying this course lead to?**

- Translator
- Administrative Officer
- Journalist
- Diplomat
- Tour Guide
- Teacher
- Hotel Manager
- International Business Representative
- Flight Attendant
- Airline Customer Service Agent
- Writer



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## **Course Title:** Information and Communication Technology (ICT) - IGCSE

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**Examining Board:** Cambridge International Examinations

**Syllabus:** 0983

### **Aim of Course**

- To show, through practical means, the advantages and disadvantages that new technology can bring.
- To prepare our pupils for the inevitable contact they will have with computers both in and out of school and later in their lives.
- To help students develop and consolidate their knowledge, skills and understanding in Information Technology.
- To provide opportunities for students to analyse, design, implement, test and evaluate ICT systems.
- To encourage students to develop as autonomous users of ICT.

### **How will the subject be taught?**

The subject is taught in the ICT Computer Room and is largely a practical based subject where students spend a good deal of time working on project work and are able to practice their ICT skills. Theory is also taught in as practical a way as possible where students can undertake a good deal of research. Much of this course also requires work to be done at home.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

Students will require access to computers outside of school hours. Where possible, we recommend that students have Microsoft Office and FrontPage on their own computer.

### **What is the scheme of assessment for this subject?**

At the end of the course students sit three examinations; normally in April and May.

**Paper 1:** is a theory paper (40%)

**Duration:** 2 hours long

**Papers 2 and 3:** practical tests (taken on the computer) (30% each)

**Duration:** Each paper is 2 hours and 30 minutes long.

### **Why you should study Information and Communication Technology (ICT) – IGCSE**

The Information and Communication Technology syllabus combines theoretical and practical studies focusing on the ability to use common software applications, including word processors, spreadsheets, databases, interactive presentation software, e-mail, web browsers and website design. Students will develop a greater awareness of how applications are used in the workplace, and consider the impact of new technologies on methods of working and on social, economic, ethical and moral issues. The skills learnt will be useful to them in their work across the curriculum, and will prepare them for future employment. Assessment of the practical tests is hardware and software independent.

### **What career opportunities could studying this course lead to?**

- Administrator
- Banker
- Financial advisor
- Teacher
- Programmer
- Web Developer
- Database developer
- Software Engineer
- Systems Analyst
- Software Developer
- E-learning Developer
- App Developer
- Web content Manager
- IT Technician

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## **Course Title: Physics - IGCSE**

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**Examining Board:** Cambridge International Examinations

**Syllabus:** 0972

### **Aim of Course**

To develop skills, attitudes and abilities relevant to Physics that will give the student a concern for accuracy and precision, safe practice, enquiry and inventiveness. To develop skills useful to all areas of life. To create an awareness of the uses and limitations of Physics in the world around us.

### **How will the subject be taught?**

Well designed studies of experimental and practical experiences together with teacher-led theory lessons. Formal testing twice termly as standard.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

There are no special requirements for this course except a basic level of mathematical skill. Students are expected to come prepared to work hard.

### **What is the scheme of assessment for this subject?**

Two written examinations at the end of the course - one of 45 minutes duration and of the multiple choice type (30%); the other of the structured response type and lasting one and a quarter hours (50%).

Additionally, students will take an alternative to practical paper of one and a quarter hours duration (20%).

### **Why you should study Physics - IGCSE**

Physics helps to develop you into a confident citizen in a technological world and to take an informed interest in matters of scientific importance. It prepares you for studies beyond IGCSE level in pure sciences or applied sciences.

This course will lay the foundations for future study at AS level. Even if you do not study Physics further, you will be learning about a lot of the Physical processes that make the world work the

way it does. Studying Physics will open a lot of future careers to you from engineering to computer science.

**What career opportunities could studying this course lead to?**

- Electrical engineer
- Electronics engineer
- Radiographer
- Acoustical Engineer
- Aero Dynamist
- Aerospace Engineer
- Air Traffic Controller
- Doctor
- Pilot
- Pharmacist
- Dentist
- Engineer
- Physicist
- Nanotechnologist
- Astronaut
- Nuclear Engineer
- Radiologist
- Pharmacist

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## **Course Title: Sociology - IGCSE**

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**Examining Board:** Cambridge International Examinations

**Syllabus:** 0495

### **Aim of Course**

The aims are to:

- Promote candidates' awareness, knowledge and understanding of human societies
- Develop an understanding of sociological method, including the collection, analysis and interpretation of data
- Provide an introduction to sociological concepts, theories and research findings
- Stimulate awareness of the range and limitations of sociological theory and research
- Promote candidates' understanding of continuity and change in social life
- Encourage a critical awareness of social, economic and political processes, and their effects
- Develop the capacity for the critical evaluation of different forms of information and evidence
- Promote an appreciation and understanding of individual, social and cultural diversity
- Enhance candidates' ability to apply sociological knowledge and understanding to their own lives and participation within society

### **How will the subject be taught?**

The subject will be taught by teacher led instructions and independent learning. We are also aiming to include field trips where possible.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

No

### **What is the scheme of assessment for this subject?**

This is in the form of two papers:

**Paper One** (60%) – there are four questions, of which Question 1 is compulsory and relates to Research Methods. Questions 2-4 can be chosen from the topics of Culture and Socialisation, Social Stratification and Power and Politics.

**Duration:** 2 hours

**Paper Two** (40%) – there are three questions – structured questions based on stimulus material relating to the following topics: family; education; crime, mass media.

**Duration:** 1 hour 45 minutes

### **Why you should study Sociology – IGCSE**

Sociology is the subject which studies the social world around us, how this social world operates and how it influences our daily lives.

Sociologists regard it as their job to understand our forever changing society. This task is undertaken by using:

- Certain 'building block' concepts such as values, beliefs, norms and identity.
- Theories – that are explanations which link a number of different social events together and which show how these social events affect each other.
- Special, tried and tested methods to study social life.

It examines the way people are socialised as this strongly influences their personalities and how they act. Different societies socialise their children into different values, beliefs, norms and roles. The subject examines basic theories and six topics that are central to mainstream sociology. The topics are: Family and Households; Education; Religion; Crime and Deviance; Work and Leisure; and Mass Media.

Sociology is a very interesting subject that challenges students to look at their social world and how it operates and affects their day to day lives.

### **What career opportunities could studying this course lead to?**

- Journalist
- Social worker
- Psychologist
- Doctor
- Sociologist
- Market Researcher
- Behavioural Therapist
- Consumer Scientist
- Counsellor
- Forensic Psychologist
- Politician
- Police Officer
- Chief Inspector

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## **Course Title: Travel and Tourism - IGCSE**

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**Examining Board:** Cambridge

**Syllabus:** 0471

### **Aim of Course**

The aims of the Cambridge IGCSE Travel and Tourism syllabus are to provide candidates with:

- an understanding of the travel and tourism industry
- theoretical knowledge of the industry and related sectors, including knowledge of travel and tourism, products and services, the infrastructure on which they depend and the transport system needed to operate them
- practical ability in a range of skills and procedures related to working in the travel and tourism industry including knowledge of the essential personal and professional skills required by individuals working in the service sector
- critical awareness of the physical, social and economic environments in which travel and tourism takes place, including understanding of the global, regional and local perspectives of travel and tourism.

### **How will the subject be taught?**

The subject will be taught as a combination of theory and practical lessons. There will be opportunities for students to apply theory to practice as they are encouraged to develop an understanding of tourist industry operations and problems. They need to apply competence in identifying procedures and solutions to scenario-based questions. They learn to use best practice from industry-established business techniques and information systems.

### **Does the course involve coursework and what does it consist of?**

The Cambridge course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

Students will use a variety of skills, developed throughout their schooling, in this course. They must have a decent grasp of literacy, numeracy and ICT in order to be able to access and understand a variety of new concepts and terminology. However, students beginning this course are not expected to have studied Travel and Tourism previously.



## What is the scheme of assessment for this subject?

The course involves two written exams which are weighted differently:

**Paper One:** 2 hours. Core paper – short answer question paper. 100 marks (60% of total marks).

**Paper Two:** 2½ hours, Short answer question paper, based primarily on Unit 5 of the syllabus. 100 marks (40% of total marks).

## Why you should study Travel and Tourism - IGCSE

Cambridge IGCSE Travel and Tourism is designed to help meet the need for skilled and knowledgeable individuals in this rapidly diversifying industry. The intention of the course is to provide a broad introduction to the travel and tourism industry and related ancillary service industries. The course develops practical skills across a range of working roles, as well as providing a global and local perspective on travel and tourism. Students gain an overview of the industry, and learn about popular destinations, customer care, working procedures, travel and tourism products and services, marketing and promotion. Through their studies, students will gain an understanding of the concepts, models and theories used within the industry, and also enhance their skills of investigation, analysis, interpretation and evaluation.

## What career opportunities could studying this course lead to?

- Tour Operator
- Entertainer
- Travel Agent
- Caterer
- Transport Provider
- Tour Guide
- Air Cabin Crew
- Ship Captain
- Wedding Planner
- Outdoor Activities Instructor
- Events Manager
- Restaurant Manager
- Head Chef

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# AS Level Subjects

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**2021 - 2022**

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## **Course Title:** International Advanced Subsidiary in Mathematics

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**Examining Board:** Pearson Edexcel

**Syllabus:** XPM01

### **Aim of Course:**

AS-Level Mathematics develops and extends a set of transferable skills. These skills include working with mathematical information, as well as the ability to think logically and independently, consider accuracy, model situations mathematically, analyse results and reflect on findings. You will be able to apply these skills across a wide range of subjects.

### **How will the Subject be Taught?**

The subject will be taught through a combination of concept explanation, mathematics skills practice and by going through past papers to enhance students' knowledge of examination techniques

### **Does the course involve coursework and what does it consist of?**

The Edexcel AS-Level Mathematics course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

Enjoyment of mathematics and problem-solving are essential in-order for you to undertake AS-level Mathematics with confidence. To be able to access the content within the AS-level course you should have a sound background in mathematics, therefore you should have obtained a grade 6 above at IGCSE.

### **What is the scheme of assessment for this subject?**

Edexcel AS-Level Mathematics is a modular course and therefore examinations take place during both January and May. There are three equally weighted (33.333%) externally assessed written examinations that are 1 hour 30 minutes long, each with a total of 75 marks. The following units are studied:

- P1 – Pure Mathematics 1
- P2 – Pure Mathematics 2
- M1 – Mechanics 1

## Why you should study International Advanced Subsidiary in Mathematics

Mathematics is a highly respected AS-level and supports progression to a wide range of degree courses and careers. All science-based degrees require good maths skills, and so do Engineering and many Computing and Economics-based and Social Science degrees.

AS-Level Mathematics is excellent preparation for degrees involving a lot of maths work, and is actually required for some degree courses.

## What career opportunities could studying this course lead to?

- Banker
- Accountant
- Scientist
- Chemical Engineer
- Engineer
- Accountant
- Financial Analyst
- Teacher
- Computer Animator
- Mobile Application Developer
- Video Game Designer
- Pharmacist
- Doctor
- Dentist
- Chemists
- Cryptographer
- Data Analyst
- Economist
- Intelligence Analyst
- Software Engineer

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## **Course Title:** International Advanced Subsidiary in Biology

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**Examining Board:** Pearson Edexcel

**Syllabus:** XBI01

### **Aim of Course**

The aim of the AS and A Level Biology course is to build on the skills acquired at IGCSE level. The emphasis throughout is on the understanding of concepts and the application of biology ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. The AS and A Level Biology is ideal for learners who want to study biology or a wide variety of related subjects at university or to follow a career in science.

### **How will the subject be taught?**

The subject will be taught via a combination of teaching sessions, practical work, research-based homeworks and consolidation questions based on the subject content of the lessons.

### **Does the course involve coursework and what does it consist of?**

The Edexcel course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

To study AS-level Biology, you need grade 6's or above at IGCSE in Biology, English and Mathematics. An understanding of chemical principles is important and therefore a good background in Chemistry is recommended. AS-level Biology also requires you to be competent in maths: you need to be comfortable with; presenting data in tables and graphs, calculations and applying statistical tests.

### **What is the scheme of assessment for this subject?**

AS biology is a modular course with three units that are externally examined in either January or May. The following units are included in AS biology:

**Unit 1** Lifestyle, Transport, Genes and Health –

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assesed in January or May and is 40% of the total IAS raw marks.

**Unit 2** Development, Plants and the Environment Lifestyle, Transport, Genes and Health -  
**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assed in January or May and is 40% of the total IAS raw marks.

**Unit 3** Practical Biology and Research Skills. Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed throughout Units 1 and 2.

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assed in January or May and is 20% of the total IAS raw marks

### **Why you should study International Advanced Subsidiary in Biology**

AS-level Biology provides a solid grounding in analytical thinking, writing reports and clear communication – all of which are useful life skills.

You will undertake laboratory and field experiments which underpin the theoretical study. The practical work not only allows you develop your analytical and practical skills but also helps develop your competence in scientific methods and scientific communication. AS biology also gives you plenty of practice in mathematical and problem-solving techniques.

### **What career opportunities could studying this course lead to?**

- Sports scientist
- Food scientist
- Researcher
- Social worker
- Agriculture
- Archeology or anthropology
- Botanist
- Teacher
- Biologist
- Zoologist
- Pharmacist
- Doctor
- Pharmacologist
- Environmental scientist
- Biomedical Engineer
- Microbiologist
- Dentist
- Physical Therapist

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## **Course Title:** International Advanced Subsidiary in Chemistry

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**Examining Board:** Pearson Edexcel

**Syllabus:** XCH11

### **Aim of Course**

AS - Level Chemistry builds on the skills acquired at IGCSE and the course includes the main theoretical concepts which are fundamental to the subject, some current applications of Chemistry, and a strong emphasis on advanced practical skills. The aim throughout the course is on the understanding of concepts and the application of Chemistry ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path.

### **How will the subject be taught?**

The subject will be taught via a combination of teaching sessions, practical work, research-based homeworks and consolidation questions based on the subject content of the lessons.

### **Does the course involve coursework and what does it consist of?**

The Edexcel course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

AS-level Chemistry requires an interest in the subject and an enthusiasm and commitment to work hard. You will need to develop your abilities to work independently and take responsibility for your own progress. A prerequisite is that you should have studied the subject at IGCSE, and ideally, you will have obtained at least a level 6 in both Chemistry and Mathematics. You will also need to be able to write effectively in English, using scientifically accurate vocabulary.

### **What is the scheme of assessment for this subject?**

AS- Level Chemistry is a modular course with three units that are externally examined in either January or May. The following units are included in AS Chemistry:

**Unit 1:** Structure, Bonding and Introduction to Organic Chemistry-

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assesed in January or May and is 40% of the total IAS raw marks.

**Unit 2:** Energetics, Group Chemistry, Halogen alkanes and Alcohols –

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assed in January or May and is 40% of the total IAS raw marks.

**Unit 3:** Practical skills in Chemistry. Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed throughout Units 1 and 2.

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assed in January or May and is 20% of the total IAS raw marks

### **Why you should study International Advanced Subsidiary in Chemistry**

Chemistry AS-level is part of the highly respected A level in Chemistry, with its broad variety of tested skills, and it is a good choice for many degrees and careers. Chemistry has been described as the 'central science' and is often combined with either physics or biology. It is a compulsory choice for anyone wishing to pursue medicine, dentistry and veterinary science, as well as chemistry-based degrees, such as pharmacy, pharmacology, and biochemistry.

### **What career opportunities could studying this course lead to?**

- Chemical Engineer
- Doctor
- Pharmacist
- Dentist
- Archeologist
- Forensic Scientist
- Polymer Chemist
- Patent Attorney
- Chemist
- Earth Scientist
- Nanotechnologist
- Paint and dye Technologist



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## **Course Title:** International Advanced Subsidiary in Physics

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**Examining Board:** Pearson Edexcel

**Syllabus:** XPH11

### **Aim of Course**

AS and A Level Physics build on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, some current applications of Physics, and a strong emphasis on advanced practical skills. The aim throughout is on the understanding of concepts and the application of physics ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. AS Physics combines practical skills with theoretical ideas to develop descriptions of the physical universe. You will learn about everything from kinematics to cosmology and many recent developments in fascinating topics, such as particle physics. Physics is more than a subject – it trains your brain to think beyond boundaries.

### **How will the subject be taught?**

The subject will be taught via a combination of teaching sessions, practical work, research-based homeworks and consolidation questions based on the subject content of the lessons.

### **Does the course involve coursework and what does it consist of?**

The Edexcel course does not include coursework as an option. Students may be asked to complete project work to aid their understanding but this work will be graded as homework and not contribute to the final examination mark.

### **Are there any special requirements of the course?**

To study AS-level Physics, you need grade 6's or above at IGCSE in Physics, English and Mathematics. You need to be comfortable with Mathematics and able to write good English that is scientifically accurate. A general interest in Science would be helpful. Much of what you learn in Physics will complement A levels in Biology, Chemistry and Mathematics.

### **What is the scheme of assessment for this subject?**

AS Physics is a modular course with three units that are externally examined in either January or May. The following units are included in AS Physics:

**Unit 1** Mechanics and materials

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assed in January or May and is 40% of the total IAS raw marks.

**Unit 2** Waves and Electricity

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assed in January or May and is 40% of the total IAS raw marks.

**Unit 3** Practical skills in Physics. Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed throughout Units 1 and 2.

**Assessment:** Written examination of 1 hour and 30 minutes, consisting of objective, structured and short-answer questions. Assed in January or May and is 20% of the total IAS raw marks

### **Why you should study International Advanced Subsidiary in Physics**

Physics is a highly respected A level. A good grade in AS-level Physics demonstrates to an employer/university that you have analytical and mathematical skills that you can apply to real life situations. There are many possible career paths that it will create for you, for example: Engineering, Medicine, Forensic Science, Astronomy, Cosmology, Electronics, Power generation, Finance and many more.

### **What career opportunities could studying this course lead to?**

- Electrical Engineer
- Electronics Engineer
- Radiographer
- Acoustical Engineer
- Aero Dynamist
- Aerospace Engineer
- Air Traffic Controller
- Doctor
- Pilot
- Pharmacist
- Dentist
- Engineer
- Physicist
- Nanotechnologist
- Astronaut
- Nuclear Engineer
- Radiologist
- Pharmacist

