British West Indies Collegiate

IGCSE COURSES

2010 – 2012

This booklet outlines IGCSE courses and curriculum for 2010-2012 and should be kept for reference throughout Years 10 and 11

I N D E X

Introduction

This booklet is designed to provide details of the IGCSE courses available to Year 10 students at the British West Indies Collegiate from September 2010, for examination in June 2012. We are providing, as we have always done, an excellent foundation for students to continue their studies into Key Stage 4 (Years 10 and 11) and then further into either the Sixth Form or the world of work. Though restricted by size and population, the Collegiate remains committed to a broad and balanced education for all students, whilst also allowing opportunities for completely free choices.

All students will follow the six IGCSE core subjects: Biology, English Language, History, Information & Communication Technology, Mathematics and Spanish. They will also follow non-examination courses in Physical Education and PSHCE (Personal, Social, Health & Citizenship Education).

In addition to the six core subjects, students must select three option subjects, **ONE** from **EACH** of the following groups:

A
English Literature
Physics

B
Business Studies
Chemistry

C
Geography
Art

Ability, interest and career preferences should be the main guiding principles in making choices between the optional subjects. Interest and commitment are important in providing motivation, as long as subjects are not chosen primarily because of the individuals who happen to teach them - or because of the friends who also happen to choose them. The principle governing career prospects, is not to shut too many doors by giving up a subject which might, in the end, turn out to be needed for a desired career, especially if a student is thinking of any career requiring specific scientific or technical knowledge.

Subject choices should be indicated on the Options Form accompanying this booklet. The completed form should be returned to the Year 9 Form Tutor, Ms Wilson, by **Tuesday 25 May**. Any further questions should be directed to either myself or Ms Wilson.

There is also a location on the Options form for parents to include their e-mail address. Some subject teachers use e-mail communication to inform parents of various deadlines or notify them of extra classes - or to provide updates/concerns relating to a student's progress and wellbeing. Many parents find this form of contact and its immediacy invaluable, and I want to encourage all parents to volunteer an address (ideally one that is secure and private) that will facilitate a channel for future communication.

Mrs S Wigglesworth
Principal
May 2010

Notes: All IGCSE examinations are with the University of Cambridge International Examinations Board (CIE).

Subject syllabi and other subject related information are accessible and downloadable via the Cambridge website (http://www.cie.org.uk/).

CIE also has a website dedicated entirely to students studying Cambridge qualifications (http://www.cambridgestudents.org.uk/). It includes resources from syllabi, past papers and study checklists, to examination information, competitions and other interactive items.

Art & Design

Course Title: IGCSE in Art & Design (Syllabus 0400)

Aims

The aims of the syllabus are the same for all the students. The aims are set out below and describe the educational purposes of a course in Art and Design for the IGCSE examination. They are not listed in order of priority.

The aims are to stimulate, encourage and develop:

1. confidence, enthusiasm and a sense of achievement in the practice of Art and Design;
2. an ability to identify and solve problems in visual and tactile form;
3. an ability to record from direct observation and personal experience;
4. the technical competence and manipulative skills necessary to form, compose and communicate in two and three dimensions;
5. knowledge of a working vocabulary relevant to the subject;
6. the ability to organise and relate abstract ideas to practical outcomes;
7. experimentation and innovation through the inventive use of materials and techniques;
8. intuitive and imaginative responses showing critical and analytical faculties;
9. an interest in, and a critical awareness of, environments and cultures.

Assessment Objectives

The assessment objectives in Art and Design are grouped under the following headings.

1. Knowledge with understanding.
2. Interpretative and creative response.
3. Personal investigation and development.

Scheme of Assessment

Students are required to enter two papers, one of which is a coursework unit (Paper 5) consisting of one finished piece plus a workbook. The other is a practical examination (10 hours) with Preparatory work. Students are given one month to do their preparatory work before the examination dates. Each paper represents 50% of the final grade.

The following different entry options are available:

Option D (Observational Study)	**Paper 1** and **Paper 5**
Option G (Interpretative Study)	**Paper 2** and **Paper 5**
Option I (Design Study)	**Paper 3** and **Paper 5**

These papers have been designed to allow students to demonstrate independently their ability to realise ideas and intentions in response to a number of differing questions / briefs. Students should use the preparation period to research their chosen question. They will be assessed on their ability to investigate, document and record their work towards a final solution.

Experimentation and selection of appropriate mediums and processes should be resolved prior to the ten hour examination itself.

During the preparatory period students are expected to produce up to three sheets of A2 supporting work. This work must be taken into the examination room where it will assist the production of the ten hour examination piece. The Supporting studies must remain with the examination work and must not be removed once the examination has started.

Initial guidance regarding the selection of question and appropriate choice of materials and processes may be sought at the beginning of the preparatory period. Students should then be advised to work independently, whether at school or at home.

Papers 1, 2 and 3
Students are required to select one question. They are expected to:

- research their chosen question, document and record with the use of sketches, notes and their own photographs from first hand study and, where appropriate, secondary sources;
- using the above, produce preparatory studies showing the investigation and development of their ideas;
- work from direct observation from primary sources in the examination.

Paper 5 - Coursework (School-based assessment)
During the course students should produce a supporting portfolio of work that relates to the chosen areas of study. This supporting portfolio will be submitted for assessment along with one main piece of finished work completed during the year.

The Centre will assess both the supporting portfolio and the main piece of finished work. One mark out of a total of 100 will be awarded.

The supporting portfolio should contain work which shows the development of ideas and the research and evaluation that has taken place during the course.

Students can either concentrate on one area of study from the above list or they can choose a thematic approach. This is where they produce work from three different areas of study but on one theme. Examples of themes include:

movement

sea creatures

food

natural forms

places of worship

This list is not exhaustive and other areas of study may be chosen.

Biology

Course Title: IGCSE in Biology (Syllabus 0610)

Overview

IGCSE Biology is a two-year course in which students learn about living organisms, their interactions with each other, and between themselves and their environments.

The course allows students to develop powers of analysis and independent reasoning. Assessing the ethical implications of new technologies is integral to understanding how scientific innovations contribute to human development. Environmental awareness and the importance of conservation are stressed.

Scheme of Assessment

Internal

Student progress is assessed continually through internal tests and homework assignments.

External

IGCSE Biology is offered at two possible levels:

1. **Core Curriculum**

   Grades available: C to G

   Students sit Papers 1, 2 and 5 (or 6)

2. **Extended Curriculum**

   Grades available: A* to G

   Students sit Papers 1, 3 and 5 (or 6)

Paper 1 (Multiple Choice Paper - compulsory)	Weighting = 30% of the final mark
Paper 2 (Core Theory Paper)	Weighting = 50% of the final mark
Paper 3 (Extended Theory Paper)	Weighting = 50% of the final mark
Paper 5 or 6 (Alt/Practical Test - compulsory)	Weighting = 20% of the final mark

All students are initially prepared for the Extended Level of entry. Those who experience considerable difficulty with the concepts covered may be entered for the Core Level.

Curriculum Content

Living Things

What defines a living thing, how they are all alike, and how do the five Kingdoms (animals, plants, fungi, bacteria, protoctists) differ from one another? What processes are important to all living things (diffusion, osmosis, respiration, etc)?

Humans as Organisms

Nutrition, gas exchange, transport, sensitivity and homeostasis in humans.

Green Plants as Organisms

Photosynthesis, gas exchange, transport, growth and sensitivity in flowering plants.

Inheritance, Reproduction and Evolution

The passage of information to parent to offspring, genetic disease and genetic engineering. Asexual and sexual reproduction with specific reference to flowering plants and humans. Evolution through natural selection.

Ecology and the Interaction of Humans and their Environment
Population sand the factors affecting their growth. Feeding relationships between organisms. Impacts of agriculture, deforestation and overpopulation on the environment.

Learning

Students are taught using a variety of interactive methods.

Practical investigations form and essential part of the course, and students are expected to build their own investigative skills as they progress through the two years.

Ultimately students will be required to use their knowledge to solve problems relating to unfamiliar situations. This requires not only a well-trained memory but also good powers of analysis and logical thought.

Advanced Level

Students wishing to pursue further studies in Advanced Level Biology must attain grades within the A* to B range.

Career Opportunities

An understanding of Biology is essential for any health related career, including Nursing, Paramedics, Veterinary Science, Medicine, Forensic Medicine, Dentistry, Psychology or Genetic technologies.

Careers in Environmental Management, Conservation, Zoology, Marine Biology, and Ecology also require qualifications in Biology.

Good grades in Biology, as with any Science, will be looked upon favourably for any future venture.

Business Studies

Course Title: IGCSE in Business Studies (Syllabus 0450)

Overview

This is a 2-year course that follows a syllabus which is usually completed by January of the final year. This allows time for the students to improve their examination technique by working through a number of past papers. There is a substantial content of the syllabus, which necessitates a lot of background reading (of various texts) to develop a thorough understanding of all topics.

Aims

The aims of the syllabus are set out below and describe the educational purposes of a course in Business Studies for the IGCSE examination. They are not listed in order of priority.

The aims are to enable students to:

1. make effective use of relevant terminology, concepts and methods and recognise the strengths and limitations of the ideas used;
2. apply their knowledge and critical understanding to current issues and problems in a wide range of appropriate contexts;
3. distinguish between facts and opinions, and evaluate qualitative and quantitative data in order to help build arguments and make informed judgements;
4. appreciate the perspectives of a range of stakeholders in relation to the environment, individuals, society, government and enterprise;
5. develop knowledge and understanding of the major groups and organisations within and outside business and consider ways in which they are able to influence objectives, decisions and activities;
6. develop knowledge and understanding of how the main types of business and commercial institutions are organised, financed and operated and how their relations with other organisations, consumers, employees, owners and society are regulated;
7. develop skills of numeracy, literacy, enquiry, selection and employment of relevant sources of information, presentation and interpretation;
8. develop an awareness of the nature and significance of innovation and change within the context of business activities.

Assessment Objectives

The four assessment objectives in Business Studies are:

1. Knowledge and Understanding
2. Application
3. Analysis
4. Evaluation

Scheme of Assessment

There is no foundation or extended tiers – all students sit the same paper which allows for Grades A* to G to be attained.

There are two papers (both 1 hour 45 minutes) each worth 50% of the final mark:

Paper 1 is mainly short answer questions covering a wide range of topics.

Paper 2 is a data response which tests the students ability to apply their theoretical knowledge to a given business situation.

There is no coursework element, but there are regular tests to determine the ongoing progress.

There is one main textbook, which has been specifically written for the syllabus although the reading of additional textbooks is highly recommended to gain slightly different perspectives on some topics.

Curriculum Content

- Business ownership and structure
- Business environment – local, national and international
- Business objectives – including marketing and accounting
- People in business – personnel issues such as recruitment, training, payment systems and motivation
- Regulating business activity – government influence, control, assistance to business activity

Advanced Level

Although passing the IGCSE Business examination is not a prerequisite it would certainly be of benefit for someone who is considering taking the subject at AS and/or A Level.

Career Opportunities

- Business management
- Business ownership
- Accounting
- Law
- Economics/politics
- Stock broking
- Banking

Chemistry

Course Title: IGCSE in Chemistry (Syllabus 0620)

Overview

IGCSE Chemistry is a two (2) year course, culminating in external examinations administered by the University of Cambridge Local Examinations Syndicate.

The course is divided into four (4) broad categories:-
Introductory, Inorganic, Physical and Organic Chemistry. The course is quite a detailed one. In light of this, most of the Introductory Section is done in Year 9.

Aims

IGCSE Chemistry seeks to:

1. provide, through well designed studies of experimental and practical chemistry, a worthwhile educational experience for all students, whether or not they go on to study science beyond this level and, in particular, to enable them to acquire sufficient understanding and knowledge to become confident citizens in a technological world;
2. develop abilities and skills that are relevant to the study and practice of science;
3. develop attitudes relevant to science, namely precision, accuracy, enquiry, and initiative, just to name a few;
4. stimulate interest in, and care for, the environment;
5. promote an awareness that the study and practice of science are co-operative and cumulative activities, and are subject to social, economic, technological, ethical, cultural influences and limitations.

Scheme of Assessment

IGCSE Chemistry is offered at two possible levels:

1. **Core Curriculum**

   Grades available: C to G

   Students sit Papers 1, 2 and 5

2. **Extended Curriculum**

   Grades available: A* to G

   Students sit Papers 1, 3 and 5

Paper 1 (Multiple Choice Paper - compulsory)	Weighting = 30% of the final mark
Paper 2 (Core Theory Paper)	Weighting = 50% of the final mark
Paper 3 (Extended Theory Paper)	Weighting = 50% of the final mark
Paper 5 (Practical Test - compulsory)	Weighting = 20% of the final mark

Curriculum Content

Students can follow either the Core curriculum only, or they may follow the Extended curriculum which includes both the Core and the Supplement.

The following is a general list of the topics to be covered.

1. The particulate nature of matter
2. Experimental Techniques
3. Atoms, elements and compounds
4. Stoichiometry
5. Electrochemistry
6. Energetics
7. Acids, bases and salts
8. The Periodic Table
9. Metals and non-metals
10. Air and water
11. Organic Chemistry

Methodology/Evaluation

Two (2) methods are used to promote the development of each topic.

1. Theory – done via classroom teaching, class discussions, group work, independent study, research and projects.
2. Practicals – appropriate practical assignments will be selected to enhance the development of each topic. These are done on a weekly basis.

Students will be constantly evaluated via classwork, practical exercises, homework, end-of-topic tests, and internal examinations. The IGCSE external examination is taken at the end of Year 11.

Advanced Level

Students wishing to pursue further studies in Advanced Level Chemistry must attain grades within the A* to B range.

Career Opportunities

The possession of Chemistry and other science qualifications paves the way for many possible career choices. A few of them are listed below.

Medicine, Teaching, Forensics, Industrial Chemistry, Pharmaceutical Science, Chemical Engineering, Materials Chemistry, Biomedical Engineering, Science Technology, Agricultural, Water or Food Technology, and many, many more.

English Language

Course Title: IGCSE in English, First Language (Syllabus 0500)

Aims

IGCSE English Language seeks to:

1. enable students to communicate accurately, appropriately and effectively in speech and writing;
2. enable students to understand and respond appropriately to what they hear, read and experience;
3. encourage students to enjoy and appreciate a variety of language;
4. complement students' other areas of study by developing skills of a more general application;
5. promote students' personal development and an understanding of themselves and others.

Scheme of Assessment

Candidates take either:	Or:
Paper 1: Reading Passage (Core)	**Paper 2: Reading Passages (Extended)**
1 hour 45 minutes	2 hours
Candidates answer two questions on one passage of 700–800 words.	Candidates answer three questions on two passages of 600–700 words each, linked by a common theme.
Eligible for Grades C–G	Eligible for Grades A*–E
50% of total marks	50% of total marks

AND

Paper 3: Directed Writing & Composition
2 hours
In Section 1 (Directed Writing) candidates are asked to read one or more short texts. They are then asked to use and develop the given information in another form, e.g. a letter, a report, a speech, or a dialogue.
In Section 2 (Composition) candidates have to write one essay from a choice of two argumentative/discursive, two descriptive, and two narrative topics.
50% of total marks

*** Please note:** As part of their English Language study, students are expected to undertake additional reading at home, of work that is of a variety of genres (styles). Students who fail to complete additional reading at home will find that they are less successful in this subject than their peers who do.

English Literature

Course Title: IGCSE in Literature, English (Syllabus 0486)

Aims

To develop the ability of students to:

1. enjoy the experience of reading literature;
2. understand and respond to literary texts in different forms from different periods and cultures;
3. communicate an informed personal response appropriately and effectively;
4. appreciate different ways in which writers achieve their effects;
5. experience literature's contribution to aesthetic, imaginative and intellectual growth;
6. explore the contribution of literature to an understanding of areas of human concern.

Scheme of Assessment

Paper One (**Open Books -** 2 hours 15 minutes) contains one passage-based question and two essay questions on each prescribed text. Students must answer three questions, one on each of their set texts. The paper will be divided into sections for Poetry, Prose and Drama, and students must answer one question from each section. Therefore, they cannot answer more than one question on each set text. At least one question must be passage-based. In all, students will write three short essays in the time allowed for external examination. Students will be allowed to take their text books into the examination room.

Paper Three (**Unseen** - 1 hour 15 minutes) comprises two questions, each asking candidates for a critical commentary on (and appreciation of) previously unseen writing printed on the question paper. Candidates answer one question only.

One question is based on a passage of literary prose (such as an extract from a novel or short story); the other question is based on a poem, or extract from a poem.

There are no set texts for this paper.

Paper	Weighting
One	75%
Three	25%

*** Please note:** As with English Language, students who undertake wider reading outside of their English Literature class requirements find they are better prepared for the demands of this course.

Geography

Course Title: IGCSE in Geography (Syllabus 0460)

Aims

The aims of the syllabus are the same for all students. The aims are set out below and describe the educational purposes of a course in Geography for the IGCSE examination. They are not listed in order of priority.

The aims are to encourage students to develop:

1. a sense of place and an understanding of relative location on a local, regional and global scale;
2. an awareness of the characteristics and distribution of a selection of contrasting physical and human environments;
3. an understanding of some of the processes affecting the development of such environments;
4. an understanding of the spatial effects of the ways in which people interact with each other and with their environments;
5. an understanding of different communities and cultures throughout the world and an awareness of the contrasting opportunities and constraints presented by different environments.

Assessment Objectives

The four assessment objectives in Geography are:

1. Knowledge with understanding
2. Analysis
3. Judgement and decision making
4. Investigation (enquiry skills, practical skills and presentation skills)

Curriculum Content

The curriculum is divided into three themes, which are collectively designed to develop an understanding of both the natural environment and the human environment.

1. **Population and Settlement**
   - **Population dynamics**
     - Describe the growth of the world's population and associated problems and show an understanding of the causes and consequences of over-population and under-population.
     - Identify and suggest reasons for contrasting patterns of population growth (or decline) as influenced by migration, birth rate and death rate, especially the impact of HIV/AIDS.
     - Describe the consequences (benefits and problems) of different patterns of population growth.
     - Identify and suggest reasons for different types of population structure as shown by age/sex pyramids.
     - Describe the factors influencing the density and distribution of population and population migration.

- **Settlement**
  - Describe and explain the factors influencing the size, development and function of urban and rural settlements and their spheres of influence.
  - Describe and give reasons for the characteristics of land-use zones of urban areas in LEDCs and MEDCs.
  - Describe the problems of urban areas in MEDCs and LEDCs, their causes and possible solutions.
  - Describe the impact on the environment resulting from urbanisation and possible solutions to reduce this impact.

2. **The Natural Environment**
   - **Plate tectonics**
     - Describe the distribution of earthquakes, volcanoes and fold mountains in relation to plate margins.
     - Describe the causes and effects of earthquakes and volcanic eruptions.
   - **Landforms and landscape processes**
     - Describe weathering, river and marine processes.
     - Describe and explain the landforms associated with these processes.
   - **Weather, climate and natural vegetation**
     - Describe the methods of collecting and measuring meteorological data.
     - Describe and explain the characteristics of the climate and natural vegetation of two ecosystems:
       tropical rain forest;
       tropical desert.
     - Describe and explain the relationship between the climate and natural vegetation in these two ecosystems.
   - **Inter-relationships between the natural environment and human activities**
     - Demonstrate the interaction between the natural environment and human activities with reference to natural hazards, landscape processes, climate and the two named ecosystems.

3. **Economic Development and the Use of Resources**
   - **Agricultural systems**
     - Describe and identify the influence of inputs (natural and human) on the processes and outputs of each of the following agricultural systems:
       a large-scale system of commercial farming;
       small-scale subsistence farming.
     - Recognise the causes and effects of shortages of food and describe possible solutions to this problem.
   - **Industrial systems**
     - Classify industries into primary, secondary and tertiary.
     - Describe and explain how the proportions employed in primary, secondary and tertiary industries differ in LEDCs and MEDCs and may change with time and level of development.
     - Describe and identify the influence of inputs on the processes and outputs (products and waste) of industrial systems.
     - Describe and explain the factors influencing the distribution and location of high technology industries and one other manufacturing/processing industry. Distribution should be studied on a global/national scale. Study should also be made of particular zones and/or industrial plants with respect to locational and siting factors.

- **Leisure activities and tourism**
  - Describe and account for the growth of leisure facilities and tourism in relation to the main attractions of the physical and human landscape.
  - Assess the benefits and disadvantages of tourism to receiving areas.
- **Energy and water resources**
  - Describe the significance of fuelwood, non-renewable fossil fuels (coal, oil and natural gas), renewable energy supplies (geothermal, wind, running water, solar and biogas).
  - Describe the factors influencing the development and siting of power stations (thermal, hydro-electric and nuclear).
  - Describe the uses, provision and competition for water resources and the impact of water shortages.
- **Environmental risks and benefits: resource conservation and management**
  - Describe how human activities (agriculture, manufacturing industries, tourism and energy production) may improve the quality of life and/or pose threats to the environment:
    soil erosion;
    global warming;
    pollution (water, air, noise, visual).
  - Demonstrate the need for sustainable development, resource conservation and management in different environments.
  - Identify areas at risk and describe attempts to maintain, conserve or improve the quality of the environment.

Scheme of Assessment

All students will take Papers One, Two and Four.

Paper One (1 hour 45 minutes) Students are required to answer three questions from a choice of six. Two questions will be set from each of the themes described above. Questions are structured with gradients of difficulty, will be resource based and involve problem solving and free response writing. **Worth 45%**

Paper Two (1 hour 30 minutes) Students are required to answer all questions on this paper. This paper is entirely skills based and will test a student's ability to handle various ways of depicting geographical data. One question is entirely based on a topographical map. **Worth 27.5%**

Paper Four (1 hour 30 minutes) This paper will be based upon the three themes discussed above but will involve an appreciation from a theoretical standpoint. Questions will test methodology of the following data collection enquiry skills:

a. questionnaires;
b. observations;
c. counts (such as pedestrian and traffic counts);
d. measurement techniques appropriate to rivers, beaches and weather.

Worth 27.5%

Questions may involve the development of suitable hypotheses appropriate to specific topics linked to the relevant geographical knowledge and understanding. Methods used to process and to present data will also be tested using both cartographical and statistical techniques. An ability to analyse data collected and to formulate conclusions will also be examined in this paper.

History

Course Title: IGCSE in History (Syllabus 0470)

Overview

IGCSE History is a two year course of study. It offers students the opportunity of studying some of the major international issues and events of the 20th century, as well as looking in greater depth at the history of a particular region or regions. However, the emphasis within the syllabus is as much on the development of historical research and enquiry skills as on the acquisition of knowledge.

Aims

1. To stimulate interest in and enthusiasm about the past.
2. To promote the acquisition of knowledge and understanding of human activity in the past.
3. To ensure that the students' knowledge is rooted in an understanding of the nature and use of historical evidence.
4. To promote an understanding of the nature of cause and consequence, continuity and change, similarity and difference.
5. To provide a sound basis for further study and the pursuit of personal interest.
6. To encourage international understanding.
7. To encourage the development of linguistic and communication skills.

Scheme of Assessment

There are three separate papers that the students will write. All students will write Paper One and Two and in addition they will write **either** Paper Three (coursework) **or** Paper Four. The Collegiate chooses the option of writing Paper Four.

On all papers students are expected to:

- recall, select, organise and deploy knowledge of the syllabus content;
- understand change and continuity, cause and consequence, similarity and difference; the motives, emotions, intentions and beliefs of people in the past;
- comprehend, interpret, evaluate and use a range of sources as evidence in their historical context.

Paper One (2 hours) consists of two sections. Section A (Years 9 & 10) will contain four questions of which students must answer 2. Section B (Year 11) will contain two questions on each of the Depth Studies. Students must answer one question on the Depth Study. All questions will be structured into 3 parts and will be based on stimulus material.

Paper Two (2 hours) requires students to answer all questions on a prescribed topic which changes from year to year. The topics will be chosen from the core content of Year 10 and will include a collection of source material relating to the prescribed topic and a series of questions based on that material. The chosen topic for the 2010 examination will be on the USSR and Eastern Europe.

Paper Four (1 hour) requires students to answer one question based on the Depth Study (Year 11). There are no options. Questions will be source-based and factual, and will be structured into several parts.

Weighting Structure of Examination Papers

Paper One	40% of overall mark
Paper Two	33% of overall mark
Paper Four	27% of overall mark

Curriculum Content

Years 9 & 10

1. The Treaty of Versailles
2. The Rise and Fall of the League of Nations
3. The Rise of Hitler and the Collapse of International Peace
4. The Cold War
5. Containing the Spread of Communism – Case Studies: Cuba, Vietnam and Korea
6. Soviet Control of Eastern Europe – Hungary, Czechoslovakia, Poland, including the fall of the USSR
7. The United Nations

Year 11

1. Complete outstanding Core Units
2. Depth Study One: Germany (1918-45)
3. Preparation for the prescribed Paper Two topic

Career Opportunities

The analytical and critical thinking skills that are developed through the study of History can be applied to a wide range of careers. Some of the possibilities are Historian, Researcher, Political Analyst, Lawyer, Archaeologist, Journalist or Teacher.

Information & Communication Technology

Course Title: Information and Communication Technology (Syllabus 0417)

Overview

The Information 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 authoring packages. 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 students in their work across the curriculum, and will prepare them for future employment.

Aims

The aims of the curriculum are the same for all candidates. These are set out below and describe the educational purposes of a course in Information and Communication Technology for the IGCSE examination. They are not listed in order of priority.

The aims are to:

1. help students to develop and consolidate their knowledge, skills and understanding in Information and Communication Technology;
2. encourage students to develop further as autonomous users of Information and Communication Technology;
3. encourage students to continue to develop their Information and Communication Technology skills in order to enhance their work in a variety of subject areas;
4. provide opportunities for students to analyse, design, implement, test and evaluate Information and Communication Technology systems;
5. encourage students to consider the impact of new technologies on methods of working in the outside world and on social, economic, ethical and moral issues;
6. help students to grow in their awareness of the ways in which Information and Communication Technology is used in practical and work-related situations.

Assessment Objectives

The two assessment objectives in Information and Communication Technology are:

A Practical Skills

B Knowledge and Understanding

An expansion of each assessment objective follows.

A Practical Skills

Students should be able to efficiently:

1. use e-mail and the Internet to gather and communicate information;
2. use word processing facilities to prepare documents;
3. use database facilities to manipulate data to solve problems and represent data graphically;
4. integrate data from different sources into a single document or report;
5. produce output in a specified format;
6. use a spreadsheet to create and test a data model, extracting and summarising data;

7. represent data as information in a variety of chart formats;
8. create a structured website with style sheets, tables and hyperlinks;
9. create and control an interactive presentation.

B Knowledge and Understanding
Students should be able to demonstrate knowledge and understanding in relation to:

1. the functions of the main hardware and software components of computer systems;
2. the networking of information-processing systems;
3. the ways in which information and communication technology is used and the effects of its use;
4. the stages and methods of system analysis and design;
5. computing terminology.

Specification Grid

Assessment Objective Weighting

Practical Skills	60%
Knowledge and Understanding	40%

Scheme of assessment

All candidates will be entered for Papers 1, 2 and 3.

Paper 1 (2 hours) is a written paper of 100 marks assessing the skills in Assessment Objective B. The paper will contain mainly questions requiring a short response, a word, a phrase or one or two sentences, although there will be some questions requiring a more extended response.

There will be no choice of questions. The questions will test sections 1–8 of the curriculum content.

Paper 2 (2 hours 30 minutes) is a practical test of 80 marks assessing skills in sections 9–16.

Paper 3 (2 hours 30 minutes) is a practical test of 80 marks assessing skills in sections 9–16.

Practical Tests
The two practical tests will each comprise a number of tasks to be taken under controlled conditions.

The practical tests focus on the candidate's ability to carry out practical tasks rather than to explain the theory of how the tasks are completed. Candidates are assessed on their ability to complete these tasks.

Weighting of Examination Papers

Paper 1	40%
Paper 2	30%
Paper 3	30%

Curriculum Content

The curriculum content is set out in eight interrelated sections. These sections should be read as an integrated whole and not as a progression. The sections are as follows:

1. Types and Components of Computer Systems
2. Input and Output Devices
3. Storage Devices and Media
4. Computer Networks
5. Data Types
6. The Effects of Using ICT
7. The ways in which ICT is used
8. Systems Analysis and Design

Candidates should be familiar not only with the types of software available and the range of Information and Communication Technology knowledge and skills detailed below, but also with their uses in practical contexts.

No marks will be awarded for using brand names of software packages or hardware.

Assessment Criteria for Practical Tests

The curriculum content for the practical tests is set out in eight sections. The sections are as follows:

1. Communication
2. Document Production
3. Data Manipulation
4. Integration
5. Output Data
6. Data Analysis
7. Website Authoring
8. Presentation Authoring

Each section is broken down into a series of more specific assessment objectives which candidates should be able to meet. For each specific objective, there are one or more performance criteria that will be used by the examiners to mark the candidate's work.

The majority of the performance criteria will be tested.

Career Opportunities

Whatever your intended career path, good ICT skills and knowledge are increasingly becoming a standard requirement. Universities and Colleges acknowledge this, and now integrate ICT elements within most 'traditional' subject courses. Wherever you apply to work or study, ICT skills and qualifications will be viewed positively and will help you carry out your work or studies more effectively.

Mathematics

Course Title: IGCSE in Mathematics (Syllabus 0580)

Overview

The IGCSE Mathematics course is designed to develop subject based knowledge, confidence, enjoyment and logical and analytical skills. Students are encouraged to take the techniques they have been taught and use them to solve problems. Cross-curricular links are used when possible so the students can see the relevance of the subject and identify Mathematics as a tool for life not just another subject.

Aims

The aims are set out below and describe the educational purposes of a course in Mathematics for the IGCSE examination.

The aims are to enable students to:

1. develop their mathematical knowledge and oral, written and practical skills in a way which encourages confidence and provides satisfaction and enjoyment;
2. read mathematics, and write and talk about the subject in a variety of ways;
3. develop a feel for number, carry out calculations and understand the significance of the results obtained;
4. apply mathematics in everyday situations and develop an understanding of the part which mathematics plays in the world around them;
5. solve problems, present the solutions clearly, check and interpret the results;
6. develop an understanding of mathematical principles;
7. recognise 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;
8. use mathematics as a means of communication with emphasis on the use of clear expression;
9. develop an ability to apply mathematics in other subjects, particularly science and technology;
10. develop the abilities to reason logically, to classify, to generalise and to prove;
11. appreciate patterns and relationships in mathematics;
12. produce and appreciate imaginative and creative work arising from mathematical ideas;
13. 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;
14. appreciate the interdependence of different branches of mathematics;
15. acquire a foundation appropriate to their further study of mathematics and of other disciplines.

Assessment Objectives

The abilities to be assessed in the IGCSE Mathematics examination cover a single assessment objective, technique with application. The examination will test the ability of students to:

1. organise, interpret and present information accurately in written, tabular, graphical and diagrammatic forms;
2. perform calculations by suitable methods;
3. use an electronic calculator;
4. understand systems of measurement in everyday use and make use of them in the solution of problems;
5. estimate, approximate and work to degrees of accuracy appropriate to the context;
6. use mathematical and other instruments to measure and to draw to an acceptable degree of accuracy;
7. interpret, transform and make appropriate use of mathematical statements expressed in words or symbols;
8. recognise and use spatial relationships in two and three dimensions, particularly in solving problems;
9. recall, apply and interpret mathematical knowledge in the context of everyday situations;
10. make logical deductions from given mathematical data;
11. recognise patterns and structures in a variety of situations, and form generalisations;
12. respond to a problem relating to a relatively unstructured situation by translating it into an appropriately structured form;
13. analyse a problem, select a suitable strategy and apply an appropriate technique to obtain its solution;
14. apply combinations of mathematical skills and techniques in problem solving;
15. set out mathematical work, including the solution of problems, in a logical and clear form using appropriate symbols and terminology.

Scheme of Assessment

Both Extended and Core Levels are assessed by external examination only. There is no coursework element with either course. Students at either level will sit two papers as shown below.

Extended:	Paper 2	1½ hours	Short answer questions	35%
	Paper 4	2½ hours	Structured answers	65%
Core:	Paper 1	1 hour	Short answer questions	35%
	Paper 3	2 hours	Structured answers	65%

The grades available for each syllabus are shown below:

Extended: A* to E

Core: C to G

For most further and higher education courses a Grade C in GCSE Mathematics is a prerequisite, and it should be noted that a Grade C on the Core papers is indistinguishable from a Grade C on the Extended paper when the results are published.

Curriculum content

The course is split into two levels, Core and Extended. Both levels cover the same basic areas of Number, Algebra, Geometry, Trigonometry, Area and Volume, Transformations, Probability and Statistics.

The Core level is directed more at students who find Mathematics a challenge and it focuses on problem solving in real life situations where possible. The Extended level has a more analytical and theoretical perspective and allows the talented student to indulge their creativity with problem solving.

Career Opportunities

The reason that most students take Mathematics is because it is compulsory until the end of Year 11. However, there are other reasons why study of this subject is to be encouraged.

There are many careers which are mathematically based for example Computer Programmer, Systems Analyst, Banker, Acturist, Pilot, Accountant, Economist, Statistician and Mathematics teaching of course!

Many employers, regardless of the job being applied for, will look more favourably on prospective employees with Mathematics due to the logical and analytical skills required to succeed in this field. The majority of Higher education courses will accept passes in Mathematics for entrance for the same reason, particularly Medicine and Science based subjects.

Physics

Course Title: IGCSE in Physics (Syllabus 0625)

Aims

1. To provide, through well designed studies of experimental and practical science, a worthwhile educational experience for all students so that they can acquire sufficient knowledge and understanding:
   a. to become confident citizens in a technological world;
   b. to recognise the usefulness and limitations of the scientific method and to appreciate its applicability in other disciplines and everyday life;
   c. to be suitably prepared for studies beyond IGCSE.
2. Develop abilities and skills that:
   a. are relevant to the study of physics;
   b. are useful in everyday life;
   c. encourage safe practice;
   d. encourage effective communication.
3. Develop attitudes relevant to Physics such as:
   a. concern for accuracy and precision;
   b. objectivity;
   c. integrity;
   d. enquiry;
   e. initiative;
   f. inventiveness.
4. To stimulate and awareness of, and care for, the environment.
5. To promote an awareness that:
   a. scientific theories and methods have developed, and continue to develop, as a result of co-operative activities;
   b. the study and practice of science are subject to social, economic, technological, ethical, and cultural influences and limitations;
   c. the application of science can be both beneficial and detrimental;
   d. Science transcends national boundaries and that the language of science can be universal when correctly applied.

Scheme of Assessment

Students will be entered for one of two tiers; the Core or Extended, depending on ability assessed throughout the course.

Paper 1 (45 minutes)
40 Multiple-choice questions. Compulsory for all levels, based on the Core curriculum and is designed to discriminate between Grades C-G. This accounts for 30% of the final Grade.

Either Paper 2 or Paper 3 (both 1 hour 15 minutes)
Paper 2 is for the Core Level students only and consists of 80marks of short answer and structured questions and is designed to discriminate between Grades C-G. This paper accounts for 50% of the final grade.

Paper 3 is for the Extended Level students only and consists of 80 marks of short answer and structured questions and is designed to discriminate between Grades A*-D. This paper accounts for 50% of the final grade.

Practical Assessment - Either Paper 5 (1 hour 15 minutes) **or Paper 6** (1 hour) Compulsory for all students. This component of assessment is designed to test the students skill for investigative work i.e. use of apparatus, choice of apparatus, working safely, planning using scientific method, etc.

Students will complete either the Practical (Paper 5) or Alternative to Practical (Paper 6) paper featuring questions based on experimental and observational skills or lab based procedures. This component accounts for 20% of the final grade.

Curriculum Content

Students will study the following areas of Physics.

1. General Physics: To include ideas about measurement, speed, mass, density, forces, equilibrium, energy, power and pressure.
2. Thermal Physics: To include ideas about states of matter, thermal properties of materials and thermal energy transfer.
3. Properties of Waves: To include ideas about wave properties, light, sound, ultra sound and the Electro magnetic spectrum.
4. Electricity and Magnetism: To include ideas about the phenomena of magnetism, charge, current, voltage, resistance, series and parallel circuits, electronics, the dangers of electricity, generators and transfer of electricity.
5. Atomic Physics: To include ideas about the atom, radioactivity, radioactive decay and isotopes.

Advanced Level

Students wishing to pursue further studies in Advanced Level Physics must attain grades within the A* to B range.

Career Opportunities

Students following the field of Physics have many career options. These included Astronomy, Aeronautics, Engineering, Pilot, Medicine, Radiography, Metrology, Teaching, Research and Development, Computing, Electrician, Electrical Engineering, Mechanical Engineering, and many more.

Spanish

Course Title: IGCSE in Spanish, Foreign Language (Syllabus 0530)

Overview

This IGCSE builds on the basic Spanish grammar and vocabulary the students have learned in Years 6 to 9. At this time, students should be able to:

- express themselves in the present, past and future tenses;
- write compositions describing present and past events;
- write informal letters to their friends and formal letters applying for jobs.

Aims

The aims are set out below and describe the educational purposes of a course in Spanish for the IGCSE examination.

The aims are to:

1. develop the ability to use the language effectively for purposes of practical communication within the country of residence, where appropriate, and in all the countries where the language is spoken;
2. form a sound base of the skills, language and attitudes required for further study, work and leisure;
3. offer insights into the culture and civilisation of the countries where the language is spoken;
4. develop a fuller awareness of the nature of language and language learning;
5. encourage positive attitudes toward language learning and towards speakers of other languages and a sympathetic approach to other cultures and civilisations;
6. provide enjoyment and intellectual stimulation;
7. complement other areas of study by encouraging skills of a more general application (e.g. analysis, memorising, drawing of inferences).

Assessment Objectives

The one assessment objective is Communication, which incorporates the four sub-skills:

1. Listening
2. Reading
3. Speaking
4. Writing

Scheme of Assessment

The IGCSE Spanish examination comprises 4 papers.

Paper 1 Listening (Core and Extended Syllabus)

Paper 2 Reading and Directed Writing (Core and Extended Syllabus)

Paper 3 Speaking (Core and Extended Syllabus)

Paper 4 Extended Writing (Extended Syllabus only)

In Year 11 Students will be selected for entry to either the Core or Extended Syllabus according to ability.

Students who are likely to obtain Grade C or higher will be entered for the Extended curriculum papers. All Extended curriculum students will be graded twice: once on their performance on the Core curriculum papers and once on their performance on the Extended curriculum papers. Students are awarded the higher of the two grades they achieve.

Core Curriculum Grades available: C to G	*Extended Curriculum (Core + Supplement)* Grades available: A* to G
Paper 1 Listening (45 minutes) Sections 1, 2 and 3	**Paper 1** Listening (45 minutes) Sections 1, 2 and 3
Paper 2 Reading and directed writing (1½ hours) Sections 1, 2 and 3	**Paper 2** Reading and directed writing (1½ hours) Sections 1, 2 and 3
Paper 3 Speaking (15 minutes)	**Paper 3** Speaking (15 minutes)
	Paper 4 Continuous writing (1¼ hours)

Curriculum Content

During the course, students will build on what they have learned in previous years while developing additional Spanish grammar and vocabulary knowledge. The context will vary from a range of daily routines to less frequent events, such as going to the doctor's.

Personal, Social, Health & Citizenship Education

Aims

The focus of this PSHCE course is not academic. Rather, it is an opportunity to develop the students' social responsibility and to ensure they leave the programme as a mature member of society.

Scheme of Assessment

There are a variety of methods used in assessing progress in this course. There are both teacher led and student led activities. Students will be involved in many tasks, such as journal writing, role plays, debates, public speaking, formal letter writing, visual presentations, work experience and general class discussions. Merits are awarded for work in this course, however there are no exams and there is no report card mark given.

Curriculum Content

Term One:

The Importance of a Student Council / Government

- What can a Student Council achieve?
- Goals for Student Council this year
- The value of democracy
- Nomination of people to run from your year group
- Develop and carry out an election campaign
- Vote in school wide elections

Introduction to Careers

- Writing a curriculum vitae
- Letter of Application
- Preparing for Interviews
- Interview Techniques
- Role Play – Job Interviews
- Using the Career Library
- Initial request for Work Placements

Term Two:

Employment Rights and Laws

- Legal aspects of recruitment
- Equal opportunity law regarding race, sex, disability

Sex Education / Relationships

- Sexually Transmitted Diseases
- Contraception and Responsible Sex

Work Placement Opportunity

- Journal Entries from each day on the Job
- Evaluation of experience

Term Three:
Controversial Issues – Debate and Discuss

- Euthanasia
- Homophobia
- Crime and Punishment
- Global Conflict

Preparing for the Years Ahead

- Coping with external exams
- Narrowing down options for Higher Study
- Preliminary research into jobs/universities of interest to find out requirements/prerequisites