Elizabeth Moir School



1GCSE Choices 2014 - 2016

AN INTRODUCTION TO IGCSE

In Form 4, students at Elizabeth Moir School begin a two year course leading to their first major set of public examinations at the end of Form 5. These examinations are set and marked by Edexcel, which is one of the main examination boards in the UK. Students are entered for the examinations through the British Council: in 2014 the charges were Rs. 13,800 per subject.

The International General Certificate of Secondary Education (IGCSE) course is the international version of the GCSE course taken by all students in the UK since 1988. It is recognised by universities and employers around the world. The courses enable students to progress smoothly to A Level as the A Level syllabuses are designed to follow on from IGCSE.

Results

IGCSE papers are graded from A* to G, or given a U grade as unclassified. Students receive their results towards the end of August. To gain entry to the 6th Form, students must gain at least grade B in five subjects including English Language and Mathematics and at least an A in the subjects that they wish to study at A Level. Students' results are also the first step to university admission and students must pass English Language and Mathematics to gain admission to British universities. Students who gain 7 or more A* grades at IGCSE receive an award from Edexcel.

Number of Subjects

English Language and Mathematics are compulsory for all students. Students must choose at least six more subjects, making at least eight in total, unless an exception is made by the Head of School for a specific reason. Students in the Literature division for English will be taught for both the Language and Literature examinations during their English lessons and must still choose at least six more subjects, making at least nine in total. Some students may wish to choose subjects from all the options, making ten subjects. Students in the top division for Mathematics take Further Pure Mathematics in addition to this, making a maximum of eleven subjects.

Choice of Subject

Factors that will affect students' choice of subject will include their interest in and enthusiasm for the subject, and their ability in it. At this stage, it is more important that students choose subjects that they enjoy and leave their future career options open, rather than choosing subjects based on what careers they are currently considering. Students are, therefore, encouraged to take a wide range of subjects, including both Science and Arts subjects, as both universities and future employers will look for well-rounded students with varied interests.

There are certain restrictions on what subjects students may choose:

- Biology and Human Biology count as two separate subjects but are taught together, so students cannot choose one but not the other.
- Students choosing Biology and Physics are strongly advised also to choose Chemistry, as Chemistry provides an important foundation for the other sciences.
- Students can only study English Literature and Further Pure Mathematics if they gain admission to the top division in the subject, which is based on their performance in their Form 3 end-of-year examinations or entrance tests.

ENGLISH LANGUAGE

English Language is a compulsory subject for all students at Elizabeth Moir School, and it aims to build key skills in all areas of the English language. The importance of this subject cannot be underestimated. A B grade in English is needed to study both in the 6th Form and at British universities. All subjects at the school are taught and tested in the English medium, therefore fluency in both written and spoken English is essential.

There are two English divisions in each class. One division is prepared for both the English Language and Literature examinations, dividing their English lessons between the two syllabuses. The other division concentrates on English Language, allowing more time to improve the fundamental principles of grammar and spelling, as well as practise the comprehension and writing skills required for the examination. Students will only be admitted into the Literature division if they have performed satisfactorily in their end-of-year English examination in Form 3 or their English Language entrance test.

What will you study?

The course will encourage the development of the following skills:

Comprehension: to read confidently and extract information from a text

Directed Writing: to write in a variety of styles for different purposes and audiences to write imaginatively, using varied and descriptive vocabulary to develop a clear understanding of grammatical usage in English to write accurately with a wide vocabulary and correct spelling Speaking Skills:

to prepare and present debates in groups or individually

Examination Structure

The examination consists of one paper lasting three hours. The paper contains a selection of stimulus material, which may include graphics as well as writing, and will be related in theme. The questions are divided into three sections that are all linked to the theme of the stimulus material:

Section A 30% Comprehension Section B 35% Directed Writing Section C 35% Creative Writing

Why do we need English?

English Language encourages students to think for themselves, to develop the ability to construct clear and concise arguments, to present personal opinions, and to make themselves understood by others. These skills are absolutely essential in life and provide the confidence to pursue a career in any area.

ENGLISH LITERATURE

English Literature at IGCSE provides students with the opportunity to think creatively and independently, and to develop and apply skills of criticism, analysis and self-expression. It allows students to engage with their studies on a personal and emotional level, and encourages them to think for themselves and develop a fluent and articulate written style.

An interest in reading is essential for those considering taking Literature, and an appreciation of literary criticism would be a helpful asset. Much of the literature studied appeals specifically to the students taking their IGCSEs, and several texts deal with relevant contemporary themes, such as prejudice, human relationships and moral issues. Literature lessons, therefore, involve plenty of lively discussion and differences of opinion.

The IGCSE English Literature syllabus aims to give students the chance to:

- i) engage with and respond to a literary text
- ii) develop a critical appreciation of the writer's craft through close textual study and through wider reading
- iii) explore through literature the cultures of their own and other societies
- iv) explore literature as a means of emotional and intellectual growth.

By the end of the two-year course, students should be able to demonstrate:

- i) a comprehensive knowledge of the texts
- ii) the ability to communicate sensitive, lively and informed personal response
- the ability to demonstrate some understanding and appreciation of authors' uses of characterisation, plot, narrative, setting and language.
- iv) insight into the social, historical and cultural contexts of the texts

The range of texts studied in preparation for the IGCSE examination is historically, culturally and formally broad, and through this variety we hope to appeal to a wide range of students.

The following texts are studied:

William Shakespeare – Romeo and Juliet John Steinbeck – Of Mice and Men

Edexcel Poetry Anthology

MATHEMATICS & FURTHER PURE MATHEMATICS

Mathematics is a compulsory subject that has to be offered by all students. Students must obtain at least grade B to gain entry to the 6th Form, as this is required for admission to all British and many other universities.

Aims

The study of Mathematics develops skills of analysis, logical argument and problem solving. This training will be useful in whatever future career is adopted.

Course and Divisions

The Mathematics classes are split into three divisions in Form 4 according to ability. Students in the top division will be entered for both the IGCSE Syllabus B and Further Pure Mathematics examinations. This division is for students whose ability in Mathematics will enable them to cope with an accelerated course. The students follow both IGCSE Syllabus B and Further Pure Mathematics in Form 4 and Form 5. The course is suitable for students who are likely to take both Maths and Further Maths at A Level.

Those in the other two divisions will be entered for IGCSE Syllabus A or Syllabus B according to their ability. Students in the higher division will be entered for Syllabus B and those in the lower division for Syllabus A. Syllabus B includes all the topics in Syllabus A and some additional topics. The structure of the questions in Syllabus A is more suitable for students who are unlikely to take Mathematics at A Level.

Provisional divisions for the Michaelmas Term of Form 4 will be decided on the basis of students' performance in their Form 3 end-of-year examination, or in the Mathematics entrance test for new students. Final divisions will be confirmed at the end of the year, after which students will not be able to change divisions.

What will you study?

Further Pure Maths	Syllabus A	<u>Syllabus B</u>
Algebra 2	Algebra 1	Algebra 1
Trigonometry	Geometry	Geometry
Calculus	Trigonometry	Trigonometry
Functions	Number manipulation	Number manipulation
Vectors	Statistics & Probability	Statistics& Probability
Series	Vectors	Vectors
Coordinate Geometry		Matrices
•		Set theory

Examination structure

	Paper 1	Paper 2
Further Pure Maths	2 hours	2 hours
Syllabus A	2 hours	2 hours
Syllabus B	1 ½ hours	2 ½ hours

PHYSICS

Why study Physics?

Physics is an interesting subject. Many people wish to understand the world around them and are often amazed by the Wonders of Nature. If this includes you, then you should definitely take Physics at IGCSE.

Requirements

Proficiency in English and Mathematics is important and an interest in the Sciences and how the world around us works is desirable.

Skills

On completion of the course students should have:

- 1. An understanding of the concepts and principles that are fundamental to Physics.
- 2. An appreciation of the relevance of Physics in everyday life.
- 3. The ability to select, organise and present information clearly and logically, using appropriate scientific terms and conventions.
- 4. The ability to design and evaluate experiments to investigate a problem involving practical observations.
- 5. The ability to handle apparatus, make accurate observations and assess the reliability of their experiment.

Syllabus

The major topics and concepts on the syllabus cover virtually all fields in Physics including force, motion, energy, pressure, electricity, electromagnetism, nuclear physics, waves and optics. The course is, therefore, varied, stimulating and challenging.

Examination

Paper 1	2 hours	66 ¾ %	Theory
Paper 2	1 hour	33 1/3 %	Practical procedures & experiments

Both papers consist of compulsory short-answer structured questions which are ramped to ensure accessibility for less-able students, as well as to stretch more-able students.

Making the Decision

There are two common reasons for choosing Physics at IGCSE:

- 1. You enjoy the Sciences and practicals.
- 2. Physics complements, and overlaps with, Chemistry and Mathematics. Physics also has some relevance to Biology and ICT.

CHEMISTRY

Why study Chemistry?

Chemistry is a requirement for many courses at university and so any possible interest in such areas must be acted upon at this stage. The following fields require Chemistry and often need good grades at both IGCSE and A level: Medicine, Veterinary Science, Dentistry, Chemical Engineering and all Biological Sciences.

Requirements

Proficiency in English and Mathematics is important and an interest in the Sciences and how the world around us works is desirable.

Skills

Students will learn to:

- 1. Appreciate how the world around us works Is acid rain really dangerous? Is everything in the universe really made of empty space?
- 2. Understand how to use scientific methods to develop the techniques of investigation in unfamiliar situations in a safe environment.
- 3. Develop the ability to maintain a logbook in good order such that it is potentially useful to any other trained chemist.
- 4. Understand how far reaching the applications of Chemistry are and their relevance to us in our everyday lives.
- 5. Use the skills needed in A Level Chemistry and the university courses outlined above.

Syllabus

- 1. General practical investigations in to the nature of substances around us
- 2. The Chemistry of the major groups of elements
- 3. The principles of Chemistry how the world really works
- 4. Chemistry in society the effects of chemical knowledge in the real world

Examination

Paper 1	2 hours	66 ¾ %	Theory
Paper 2	1 hour	33 1/3 %	Practical procedures & experiments

Making the decision

There are three common reasons for choosing Chemistry at IGCSE:

- 1. You enjoy the Sciences and practicals in Chemistry.
- 2. Chemistry complements and overlaps with Biology, Physics and Geography. If you wish to take Biology and Physics you are encouraged also to take Chemistry.
- 3. You are interested in Biology and related areas (e.g. Medicine).

BIOLOGY AND HUMAN BIOLOGY

Biology and Human Biology are two separate subjects but are taught together so students cannot choose one of the subjects but not the other.

Biology

Biology is the study of life and all living forms. It encompasses the tiniest living virus to the complex organisation seen in humans. The IGCSE syllabus covers a wide range of topics. These include:

- The diversity of living organisms
- Cellular organisation and function
- Physiology of plants and animals
- Genetics
- Ecology
- Biotechnology

The course is both interesting and challenging in that students are often taught plant physiology in a comparative sense to animal physiology in an attempt to stretch the imagination and develop deeper understanding. Students are encouraged to evaluate information, think for themselves and present their written work in an analytical style. Research is encouraged and project work is an integral part of the course. Theoretical concepts are backed, wherever possible, with laboratory practicals, which may vary from the dissection of a rat to the study of a fresh water lake.

Human Biology

Human Biology, on the other hand, is restricted to understanding the structure and function of human systems. Human Biology students are usually awed at the meticulous, intricate working of the human body, which is like a story unraveled to them during physiology lessons. It helps students gain a better understanding of the integration that exists within their own body and often generates an interest in a career in Medicine or human sciences.

Health and disease, also part of the syllabus, help the students develop an elementary knowledge on the diagnosis, treatment and prevention of disease of worldwide importance.

Teaching the two subjects synergistically helps the student gain deeper understanding and augments interest in both subjects. These subjects are particularly useful for students' general knowledge of themselves, their health and their environment.

Examinations

For both subjects, there are two papers:

Paper 1	2 hours	66 ¾ %	Theory
Paper 2	1 hour	33 ½ %	Practical procedures & experiments

HISTORY

Why study History?

History is an education in life, the world and how it came into existence. It is a fascinating and varied subject involving not only the study of past societies and cultures but of courage and cowardice, war and peace, prosperity and poverty, freedom and persecution, and good and evil.

What will you study?

Students learn about some of the most interesting, dramatic and important events of the 20th century:

A World Divided: International Relations, 1919-39 & 1945-62

Treaty of Versailles, League of Nations, Appeasement, Korean War, Cuban Missile Crisis

The USA, 1917-29

Roaring Twenties, Jazz Age, The Boom, Flappers, Prohibition, Red Scare

Conflict, Crisis and Change: China, 1934-1989

Long March, Civil War, Great Leap Forward, Cultural Revolution, Tiananmen Square Massacre

The course is designed to have as much relevance to today's students as possible by focusing on issues that continue to dominate the modern world such as how to maintain peace in the world, how to prevent conflict between superpowers, how to achieve equality between different races and social groups, and whether social change is always positive. Students study, for example, why world war couldn't be prevented in 1939 but was in the Cold War, and why Blacks in the USA were able to gain equality and democratic freedoms, but people in China were not.

Another key focus of the course is studying some of the most fascinating personalities in History. Students learn about some of the most inspirational leaders of all time like Woodrow Wilson and John F Kennedy, about controversial figures like Neville Chamberlain and Al Capone, and about the tyrants responsible for the worst atrocities in History – Mussolini, Hitler, Stalin and Mao.

What skills do you need?

The most important skill required is the ability to express your ideas clearly in fluent written English. The examination and the course demand a lot of writing so good grammar and spelling are essential. Students should also be enthusiastic about the subject having enjoyed it in Form 3, and take an active interest in modern politics and current affairs.

What is History useful for?

History teaches key skills that will be essential in all fields of later life. Students learn to:

- (i) research independently
- (ii) write clearly and coherently
- (iii) analyse difficult concepts logically
- (iv) discuss ideas confidently and intelligently
- (v) argue originally and persuasively
- (vi) *interpret* historical sources accurately

GEOGRAPHY

Geography is the study of the world around you. The IGCSE course develops and extends many of the issues you have already studied in Geography as well as introducing new ideas and concepts. Some of the human and physical issues you will learn about are:

- Why are some countries wealthier than others?
- How sustainable is economic development?
- How are people affecting the environment?
- What are the positive and negative impacts of tourism?

A key component of the course is independent investigation of Geographical issues through fieldwork. As well as developing practical skills, this is designed to highlight the local impact of global issues and to make the course as relevant to your life as possible. Geography is about you and your world.

Syllabus

The syllabus is divided into three sections:

Section A: The Natural Environment and People

Section B: People and their Environments

Section C: Global Issues

In Geography, you will learn about real places and how they fit Geographical models. You will learn skills such as interpreting maps, diagrams and satellite images. You will draw your own diagrams and graphs to illustrate your notes. Geography is not just about acquiring knowledge but also about developing the skills needed to understand our environment.

Examination

There is one paper, lasting two hours forty-five minutes, with three questions on each section, of which students have to answer two questions in both Sections A and B and one from Section C. There are a variety of questions types, such as multiple-choice questions, short and extended answer questions, graphical and data questions and fieldwork questions.

What is Geography useful for?

At the end of the two years studying Geography, you will have an up to date knowledge about the issues affecting us today. Geography leads on to a wide range of careers, such as engineering, town planning, surveying, environmental management and development. Geography is a useful foundation for Economics and teaches you skills that will prepare you for life in the 21st century.

ART

Art is about imagination and originality. The Art course is a basic introduction to the elements and principles of Art and is designed to develop:

- Knowledge of how Art is made methods, media, materials
- Understanding of the cultural and historical contexts in which Art is created
- Ability and skill in Art

Syllabus

Students are encouraged to develop their own artistic styles and ideas based on the experience and knowledge of Art they gain through the course. They learn and practise the fundamental techniques of sketching, drawing and colouring and explore a wide range of different media. A core part of the syllabus is learning about the work of important artists throughout History and studying their style and technique and the context in which their art was created. The examination normally requires students to study the work of a particular artist or artists as a stimulus for their own work, as well as pursuing independent research into other artists that interest them.

Course and Examination Structure

Students are assessed on the basis of an examination piece that they have 10 hours to work on under examination conditions and six weeks to prepare for in advance. Students must also submit a portfolio of their preparatory work for the examination through the year. As students receive the paper six weeks prior to the examination, a substantial amount of the preparatory work must be completed in this time. For this reason, students take the examination at the end of Form 4 so that this work does not disrupt their revision for their other examinations in Form 5. Students should be aware that both the course and the preparatory period requires considerable hard work and demands great commitment, self-motivation and independence.

What is Art useful for?

Artistic skills and imagination are very useful in a wide range of subjects while a basic knowledge about major artists and artistic movements is a substantial advantage in History. Art provides a good foundation for a wide range of careers including Architecture, Design, Fashion, Advertising, Graphic Design and many media related fields from Photography to Filmmaking.

Materials

Students are given a list of materials they will need at the beginning of the course and need to ensure that they are properly equipped for classes. They have the choice of working with water colours or acrylic paint. The school will supply additional materials during the course.

ICT

Information and Communication Technology (ICT) continues to play an increasingly important role in the modern world, at home, at school and at work. It is essential that students are comfortable with the latest technology and studying ICT will ensure that they are.

The IGCSE course focuses on practical applications of ICT and develops and further extends much of what students have already learned, from how to use core software packages to thinking about the advantages and disadvantages of computers and the internet for the modern world.

Aims

The course aims to encourage the exploration and study of ICT in a variety of contexts: home, community, business, industry, recreation and education. Students will be given the opportunity to acquire competence, ability and critical skills through the implementation, use and evaluation of a range of ICT systems. Students can develop their interests in, enjoyment of, and critical reflections about ICT as an integral part of modern society.

Syllabus

The course is based on an introduction to a wide variety of aspects of ICT:

- ICT systems: hardware, software, data storage, inputs, outputs, networks
- Applications of ICT systems and modeling, data logging and control
- Ethical, social, political and economic consequences of ICT
- Data storage, security and file management
- Problem-solving using ICT
- System analysis, design and implementation
- The internet and its uses

A key component of the course is practical use of computers and learning how to input, manipulate and present data in common software packages that students will need to use in later life. This includes:

- Word processing
- Desk top publishing
- Databases
- Spreadsheets
- Website publishing

Examination Structure and Coursework

The written paper lasts 1 hour 30 minutes, carries 50% of the marks available and is based on short-answer questions. The other 50% of the marks are awarded for an externally assessed practical examination which lasts 3 hours and consists of structured activities.

FRENCH

Why study French?

French is the official language of 41 countries and is the 5th most widely spoken language in the world with over 300 million speakers. Being able to speak, write and understand French will enable you to enjoy visiting France and other Francophone countries, to work with people who live in these countries, or even to live there yourself.

From Charlemagne to Napoleon, from the Enlightenment to the French Revolution, from Voltaire to Jean-Paul Sartre, from Joan of Arc to Zinedine Zidane, France has one of the most fascinating cultures of any country. Each year, over thirty million people visit Paris to see La Tour Eiffel, Le Louvre, Versailles and other famous sites. Studying French provides a wonderful opportunity to learn about France's incredibly rich history as well as about life in France today.

What will you study?

The IGCSE course focuses on developing students' ability to communicate effectively in French both orally and in writing. The syllabus is designed to prepare students for practical situations they may confront if they were visiting or living in a French-speaking country. It is based on five topics that cover a wide range of issues:

<u>Home and Abroad</u> Urban & rural life, Travel, Holidays, Services, Customs

Education and Employment Childhood, School, Work, Future plans

<u>House and Home</u> Homes, Family & Friends, Housework, Food & Drink

The Modern World Environment, Media, ICT

Social Activities Special occasions, Hobbies, Sports, Shopping, Health

Students learn the language through a wide range of activities from games and role-plays in French to watching French films and looking at French websites. To improve their communication skills, they are expected to speak in French at all times and given French pen pals to write to.

Examination Structure

Paper 1 30 minutes 33 ⅓ % Listening

Paper 2 1 hour 30 minutes 66 \(^2\)_3 \(^3\) Reading & Writing

Paper 3 10 minutes Speaking

Students are given a separate grade for Spoken French based on their performance in Paper 3. Their main grade is based only on Papers 1 and 2.

The Listening and Reading sections of the examination are based on a wide range of short-answer questions that test students' comprehension of given material. The Writing and Speaking sections assess students' ability to communicate effectively and accurately using appropriate grammar and vocabulary.

What is French useful for?

Many universities expect students to have learned a second language and some courses require students to know another language. Language skills are also increasingly in demand by employers and anyone who is fluent in two languages is at a massive advantage in the modern job market. French is particularly important for students from Britain and other Western European countries and for Canadians.

NATIVE LANGUAGES

Elizabeth Moir School offers classes in Sinhala and Tamil at IGCSE and can provide students with a syllabus and specimen papers in other languages, as well as helping to find private tuition, where possible.

Why study a Modern Language?

Language skills are increasingly in demand by universities and anyone who is fluent in two languages is at a massive advantage in the modern job market. Studying a language also provides a fascinating opportunity to learn about a country's history, geography and culture. Students whose native language is not English are strongly encouraged to study this language. It will obviously be a great advantage to be able to speak and write the language of the country in which you may live and a formal qualification may be required to work in this country. For students who have had part of their education in their native language, this language may also be a relatively easy option.

Syllabus

Modern languages are examined either as a First or Second Language:

- First Language examinations are designed for students who are fluent in both English and the relevant language and test skills such as translation and essay-writing
- Second Language examinations are designed for students who have been learning the language for between 1 and 5 years and test basic communication skills

	Edexcel		Cambridge	
	2 nd Language	1 st Language	2 nd Language	1 st Language
Afrikaans			✓	✓
Arabic		✓	✓	✓
Bengali		✓		✓
Burmese				✓
Chinese	~		~	~
Czech				✓
Dutch			✓	✓
French	~		✓	✓
German	~		✓	✓
Greek		✓	✓	✓
Gujarati		✓		✓
Hindi			✓	✓
Indonesian				✓
Italian			✓	
Japanese			✓	✓
Korean				✓
Malay			✓	
Nepali				✓
Panjabi				✓
Portugese			✓	✓
Russian				✓
Setswana				✓
Sinhala		✓		✓
Spanish	✓		✓	✓
Swahili		✓	✓	
Tamil		✓	✓	
Thai				✓
Turkish		✓		✓
Urdu		✓	~	~

OPTIONS

All students take English Language and Mathematics. Students in the top division for English also take English Literature and students in the top division for Mathematics also take Further Pure Mathematics.

Students must choose at least six more subjects from the following list:

Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Physics	Chemistry	Biology & Human	History	Geography	ICT
		Biology	Sinhala	Sinhala	French
					Art

- Biology and Human Biology count as two separate subjects but are taught together, so students cannot choose one but not the other.
- Students who wish to study any other language should include this in their list of subjects.
- Students who wish to take English Literature or Further Pure Mathematics should enter these subjects in their choices. Admission to these subjects will be based on students' performance in the Form 3 end-of-year examinations or entrance tests.

			SUBJECT CHOICES	
Name:			Date:	
Subjects:	1.	Mathematics	2.	English Language
	3.		4.	
	5.		6.	
	7.		8.	
	9.		10.	
	11.			