

# SUBJECT SYNOPSIS

## Preparatory Course for Pearson Edexcel International GCSE Secondary 3 & 4

### SECONDARY 3 & 4 – ENGLISH

#### **English B (Specification B) (4EB0)**

The Edexcel International GCSE in English Language (Specification B) qualification enables students to:

- Read a range of material from a variety of sources, including literary material, non-literary material and media
- Read for a variety of purposes with understanding and enjoyment
- Use written English for a variety of purposes such as narration, argument, giving instruction content, paying due attention to the appropriateness and quality of written expression. Develop the ability to construct and convey meaning in written language, matching style to audience and purpose

Students of Edexcel International GCSE in English B will build fundamental skills. These key skills will enable students to tackle a range of different tasks in the International GCSE course. These foundational courses in turn has been split into Key Reading Skills, Key Technical Skills and Key Writing Skills. Many of the International GCSE tasks require students to deploy a range of different skills together.

### SECONDARY 3 & 4 – ESL

#### **English as a Second Language (ESL) (4ES0)**

The Edexcel International GCSE in English as a Second Language (ESL) is a qualification which has the equivalent benchmarks of Level B2 of the Council of Europe's Common European Framework of Reference for Languages for either students obtaining their secondary education through English as a medium of instruction, or studying English in order to enhance their future educational or employment prospects.

The Edexcel International GCSE in English as a Second Language (ESL) qualification enables students to:

- Understand a wide variety of complex reading texts, recognising implicit meaning and adapting own style and speed of reading to different texts and purposes
- Understand standard spoken language, whether live or broadcast, on both unfamiliar and familiar topics normally encountered in personal, social, academic or vocational contexts
- Write clear, well-structured texts using an appropriate style, highlighting relevant salient issues, expanding and supporting points of view with supporting arguments (where relevant) and showing controlled use of organisational patterns, connectors and cohesive devices
- Express themselves fluently, spontaneously and appropriately in a range of speaking contexts with little obvious searching for expressions or use of avoidance strategies
- Develop the skills necessary for further study or employment, either in English- speaking countries or where English is used as the main medium of communication for business and commerce
- Develop an understanding of the nature of language in different cultural contexts in order to build up competence in communication

Students are expected to understand the main ideas of complex text about both concrete and abstract topics; interact with a degree of fluency and spontaneity that makes interaction possible without strain; produce clear, detailed text on a wide range of subjects; and explain a viewpoint on a topical issue, giving the advantages and disadvantages of various options.

Students will be expected to communicate formally and informally in a range of contexts, and will also be expected to understand a wider range of texts, styles and registers than they can produce themselves. The aim of the Edexcel International GCSE in English as a Second Language (ESL) is to test English language competence through realistic and contextualised tasks based on authentic texts.

## SECONDARY 3 & 4 - MATHEMATICS

The Edexcel International GCSE in Mathematics (Specification A) qualification enables students to:

- Develop their knowledge and understanding of mathematical concepts and techniques
- Acquire a foundation of mathematical skills for further study in the subject or related areas
- Enjoy using and applying mathematical techniques and concepts, and become confident to use mathematics to solve problems
- Appreciate the importance of mathematics in society, employment and study

Key topics include:

### **Number - Numbers and the number system**

Use numerical skills in a purely mathematical way and in real-life situations.

### **Algebra - Equations, formulae and identities**

#### **Sequences, functions and graphs**

- Use letters as equivalent to numbers and as variables
- Understand the distinction between expressions, equations and formulae
- Use algebra to set up and solve problems
- Demonstrate manipulative skills
- Construct and use graphs

### **Geometry - Shape, space and measure**

#### **Vectors and transformation geometry**

- Use properties of angles
- Understand a range of transformations
- Work within the metric system
- Understand ideas of space and shape
- Use ruler, compasses and protractor appropriately

### **Statistics**

- Understand basic ideas of statistical averages
- Use a range of statistical techniques
- Use basic ideas of probability

## SECONDARY 3 & 4 - PURE MATHEMATICS

The Edexcel International GCSE in Further Pure Mathematics encourages students to:

- Develop knowledge and understanding of mathematical concepts and techniques
- Develop mathematical skills for further study in the subject or related areas

- Enjoy using and applying mathematical techniques and concepts, and become confident to use mathematics to solve problems
- Appreciate the importance of mathematics in society, employment and study

Key topics include:

- Logarithmic functions and indices
- The quadratic function
- Identities and inequalities
- Graphs
- Series
- Binomial Series
- Scalar and vector quantities
- Rectangular Cartesian coordinates
- Calculus
- Trigonometry

## SECONDARY 3 & 4 - PHYSICS

### **Physics (4PH0)**

The Edexcel International GCSE in Physics is designed for use in schools and colleges. It is part of a suite of International GCSEs offered by Edexcel. The course offers students the opportunity to experience physics within the context of their general education. The course design provides a basis for progression to further study in GCE Advanced Subsidiary and Advanced Level Physics.

The Edexcel International GCSE in Physics enables students to:

- Learn about the unifying patterns and themes of physics
- Acquire knowledge and understanding of physical facts, concepts and principles
- Appreciate the practical nature of physics, developing experimental and investigative skills based on correct and safe laboratory techniques
- Appreciate the importance of accurate experimental work and reporting as scientific methods
- Develop a logical approach to problem solving in a wider context
- Evaluate, in terms of their scientific knowledge and understanding, the benefits and drawbacks of real-life applications of science, including their everyday, industrial and environmental aspects
- Select, organise and present information clearly and logically, using appropriate scientific terms and conventions
- Prepare for more advanced courses in physics and for other courses which require them to have a knowledge of physics

## SECONDARY 3 & 4 – CHEMISTRY

### **Chemistry (4CHO)**

The Edexcel International GCSE in Chemistry is designed for use in schools and colleges. It is part of a suite of International GCSEs offered by Edexcel. The course offers students the opportunity to experience chemistry within the context of their general education. The course design provides a basis for progression to further study in GCE Advanced Subsidiary and Advanced Level Chemistry.

The Edexcel International GCSE in Chemistry enables students to:

- Learn about the unifying patterns and themes of chemistry
- Acquire knowledge and understanding of chemical facts, concepts and principles
- Appreciate the practical nature of chemistry, developing experimental and investigative skills based on correct and safe laboratory techniques

- Appreciate the importance of accurate experimental work and reporting as scientific methods
- Develop a logical approach to problem solving in a wider context
- Understand the widespread importance of chemistry and how materials are used in the world
- Evaluate, in terms of their chemical knowledge and understanding, the benefits and drawbacks of real-life applications of science, including their everyday, industrial and environmental aspects
- Select, organise and present information clearly and logically, using appropriate scientific terms and conventions
- Prepare for more advanced courses in chemistry and for other courses which require them to have a knowledge of chemistry

## SECONDARY 3 & 4 – BIOLOGY

### **Biology (4BIO)**

The Edexcel International GCSE in Biology is designed for use in schools and colleges. It is part of a suite of International GCSEs offered by Edexcel. The course offers students the opportunity to experience biology within the context of their general education. The course design provides a basis for progression to further study in GCE Advanced Subsidiary and Advanced Level Biology.

The Edexcel International GCSE in Biology enables students to:

- Learn about the unifying patterns and themes of biology
- Acquire knowledge and understanding of biological facts, concepts and principles and the skills needed to use them in new and changing situations
- Appreciate the practical nature of biology, developing experimental and investigative skills based on correct and safe laboratory techniques
- Appreciate the importance of accurate experimental work and reporting as scientific methods
- Sustain and develop an enjoyment of, and interest in, the study of living organisms
- Evaluate, in terms of their biological knowledge and understanding, the benefits and drawbacks of real-life applications of science, including their everyday, industrial and environmental aspects
- Select, organise and present information clearly and logically, using appropriate scientific terms and conventions
- Prepare for more advanced courses in biology and for other courses which require them to have a knowledge of biology

## SECONDARY 3 & 4 – ACCOUNTS

This subject focuses on the skills of recording, reporting, presenting and interpreting financial information.

It enables students to:

- Understand the nature and purpose of accounting in business and non-profit-making organisations, and the principles on which accounting is based
- Understand the use of accounting as an aid to business decision making
- Understand the use of accounting as a means of assessing the financial position of an organisation
- Develop the abilities to quantify, to judge relevance, and to write clear and concise explanations

## SECONDARY 3 & 4 – COMMERCE

Commerce aims to provide students with a knowledge and understanding of the basic principles of commerce. It provides an overall understanding of commercial activities in business both domestically and internationally.

The subject focusses on five areas such as Production and Commercial Activity, Trade, Consumer Credit and Protection, Business Ownership and Aids to Trade.

It aims to develop the students with:

- An understanding of the purpose of business activity and its importance
- An understanding of the basic principles of commerce and commercial activities
- An understanding of the various documents used in commercial activities
- An understanding of the importance of customer credit and consumer protection act in trade
- An understanding of the importance of different forms of organisation in the private and public sector
- The skills to analyse the importance of accounting information in business
- The skills to analyse the classification of sources of finance
- The skills to analyse the importance of banking, insurance, communication, transportation and warehousing in business

## SECONDARY 3 & 4 – HISTORY

History requires students to demonstrate understanding of World History during the period of the 19th and 20th century.

Students will be able to:

- Recall, select and communicate historical information
- Explain and analyse, make judgements about key features and the concepts in history of causation, consequence and change
- Utilise source materials by comprehending, interpreting, cross referencing, and to evaluate the historical claims

## SECONDARY 3 & 4 – INFORMATION COMMUNICATION TECHNOLOGY (ICT)

The Edexcel International GCSE in ICT enables students to:

- Acquire and apply ICT skills, knowledge and understanding in a range of contexts
- Develop ICT-based solutions to address challenges and solve problems
- Develop an understanding of ICT systems
- Develop an understanding and awareness of current and emerging technologies
- Develop an awareness of the legal, social, ethical and environmental consequences of the use of ICT systems for individuals, organisations and society
- Recognise potential risks when using ICT and develop safe, secure and responsible practice

Key topics include:

- Types of ICT systems
- Hardware
- Data capacity terms
- Networks
- Internet
- Intranet Impact of ICT
- Legal issues
- Interface features
- Files management
- Health issues
- Risks
- Security
- Software applications: including organising, editing, formatting, etc

## SECONDARY 3 & 4 – CHINESE

The Edexcel International GCSE in Chinese is designed for use in schools and colleges. It is part of a suite of qualifications offered by Edexcel.

The Edexcel International GCSE in Chinese enables students to:

- Develop understanding and use of written forms of the target language, in a range of familiar and practical contexts, and for a variety of purposes
- Develop understanding and use of the spoken forms of the target language, in a range of familiar and practical contexts, and for a variety of purposes
- Develop the ability to communicate effectively in the target language through the written word, using a range of vocabulary and structures
- Develop the ability to communicate effectively in the target language through speaking, using a range of vocabulary and structures
- Develop a knowledge and understanding of the target language grammar and its practical application
- Develop a knowledge and understanding of countries and communities where the target language is spoken
- Develop positive attitudes towards modern foreign language learning
- Acquire a suitable foundation for further study of the target language