EDEXCEL CERTIFICATE
IGCSE in Chemistry (9-1) Specification

Specification Summary

1. Principles of chemistry
   (a) States of matter
   (b) Elements, compounds and mixtures
   (c) Atomic structure
   (d) The Periodic Table
   (e) Chemical formulae, equations and calculations
   (f) Ionic bonding
   (g) Covalent bonding
   (h) Metallic bonding
   (i) Electrolysis

2. Inorganic chemistry
   (a) Group 1 (alkali metals) – lithium, sodium and potassium
   (b) Group 7 (halogens) – chlorine, bromine and iodine
   (c) Gases in the atmosphere
   (d) Reactivity series
   (e) Extraction and uses of metals
   (f) Acids, alkalis and titrations
   (g) Acids, bases and salt preparations
   (h) Chemical tests

3. Physical chemistry
(a) Energetics  
(b) Rates of reaction  
(c) Reversible reactions and equilibria

4 Organic chemistry  
(a) Introduction  
(b) Crude oil  
(c) Alkanes  
(d) Alkenes  
(e) Alcohols  
(f) Carboxylic acids  
(g) Esters  
(h) Synthetic polymers
EDEXCEL CERTIFICATE
IGCSE in Physics (9-1) Specification

Specification Summary

1 Forces and motion
(a) Units
(b) Movement and position
(c) Forces, movement, shape and momentum

2 Electricity
(a) Units
(b) Mains electricity
(c) Energy and voltage in circuits
(d) Electric charge

3 Waves
(a) Units
(b) Properties of waves
(c) The electromagnetic spectrum
(d) Light and sound

4 Energy resources and energy transfers
(a) Units
(b) Energy transfers
(c) Work and power
(d) Energy resources and electricity generation
5 Solids, liquids and gases
(a) Units
(b) Density and pressure
(c) Change of state
(d) Ideal gas molecules

6 Magnetism and electromagnetism
(a) Units
(b) Magnetism
(c) Electromagnetism
(d) Electromagnetic induction

7 Radioactivity and particles
(a) Units
(b) Radioactivity
(c) Fission and fusion

8 Astrophysics
(a) Units
(b) Motion in the universe
(c) Stellar evolution
(d) Cosmology
EDEXCEL CERTIFICATE
IGCSE in Biology (9-1) Specification

Specification Summary

1 The nature and variety of living organisms
   (a) Characteristics of living organisms
   (b) Variety of living organisms

2 Structure and functions in living organisms
   (a) Level of organisation
   (b) Cell structure
   (c) Biological molecules
   (d) Movement of substances into and out of cells
   (e) Nutrition
   (f) Respiration
   (g) Gas exchange
   (h) Transport
   (i) Excretion
   (j) Co-ordination and response

3 Reproduction and inheritance
   (a) Reproduction
   (b) Inheritance

4 Ecology and the environment
   (a) The organism in the environment
   (b) Feeding relationships
   (c) Cycles within ecosystems
   (d) Human influences on the environment

5 Use of biological resources
(a) Food production
(b) Selective breeding
(c) Genetic modification
(Genetic engineering)
(d) Cloning