OCR A-Level Chemistry Revision Courses

EACH COURSE IS COVERED IN 1 DAY

Course 1 – Atomic Structure, The Periodic Table and The Mole

Atomic structure
Electronic configurations & Ionisations Energies
Bonding, Intermolecular Forces, structure and properties
The Periodic Table & Periodicity
Group 2 & Group 7
Redox
The Mole, amount of substance & Empirical formulae

Course 2 – Basic Organic Chemistry and Basic Organic Analysis

Basic organic chemistry
Alkanes, fractional distillation & refining
Alkenes and addition polymers
Halogenoalkanes
Alcohols
Basic organic analysis – Mass spectroscopy and IR Spectroscopy

Course 3 – Physical Chemistry

Energetics
Equilibria, Le Chatelier's Principle and K_C Expressions
Kinetics (Rates of Reaction)
The Ideal Gas Equation (PV=nRT)

Course 4 – Advanced Organic Chemistry and Advanced Organic Analysis

Aldehydes and Ketones
Oxidising and Reducing Agents in organic chemistry
Carboxylic acids, acyl chlorides and esters
Benzene, Phenols and Aromatic chemistry
Polymers
Amines, amino acids & Chirality
Advanced Organic synthesis
Advanced organic analysis – NMR spectroscopy and Chromatography

Course 5 – Advanced Physical Chemistry

Rate Equations, Rate constants, Arrhenius and Activation Energies
Acids, Bases, pH and Buffers
Thermodynamics – Born Haber Cycles, Entropy & Free Energy

Course 6 – Electrochemistry, Transition Elements and Aqueous Chemistry

Transition Elements
Electrode Potentials and Electrochemistry/Cells
Fuel and Storage Cells
Reactions of ions in aqueous solution