

**ECONOMICS A LEVEL**

	<u>Morning Sessions</u>		<u>Afternoon Sessions</u>	
	<b>Session 1 9.30-11:00 am</b>	<b>Session 2 11:15-12:45pm</b>	<b>Session 3 1.15-2.45pm</b>	<b>Session 4 3.00-4.30pm</b>
<b>Day 1</b>	<b>Economic Problem, Demand and Supply</b> <ul style="list-style-type: none"> <li>• Economic problem</li> <li>• Price Mechanism</li> <li>• Elasticities</li> </ul>	<b>Market Failure</b> <ul style="list-style-type: none"> <li>• Externalities</li> <li>• Merits, Demerits</li> <li>• Public Goods</li> <li>• Imperfect Information</li> </ul>	<b>Government Intervention, Behavioural Economics</b> <ul style="list-style-type: none"> <li>• Taxes, Subsidies</li> <li>• Price Controls</li> <li>• Biases</li> <li>• Policies</li> </ul>	<b>Paper 1 practice</b> <ul style="list-style-type: none"> <li>• Multiple Choice</li> <li>• Step questions</li> <li>• Extended exam question (marked overnight)</li> </ul>
<b>Day 2</b>	<b>Business Economics</b> <ul style="list-style-type: none"> <li>• Objectives of Firms</li> <li>• Cost Structures</li> <li>• Revenues</li> <li>• Profits</li> <li>• Free Market</li> </ul>	<b>Market Structures</b> <ul style="list-style-type: none"> <li>• Monopoly</li> <li>• Price Discrimination</li> <li>• Oligopolies</li> <li>• Game Theory</li> </ul>	<b>Labour Market</b> <ul style="list-style-type: none"> <li>• Demand and Supply</li> <li>• Trade Unions</li> <li>• Monopsony</li> </ul>	<b>Paper 1 practice</b> <ul style="list-style-type: none"> <li>• Multiple Choice</li> <li>• Step questions</li> <li>• Extended exam question (marked overnight)</li> </ul>
<b>Day 3</b>	<b>Macro - Foundations</b> <ul style="list-style-type: none"> <li>• GDP</li> <li>• Index numbers</li> <li>• Objectives</li> <li>• AD/AS</li> </ul>	<b>Macro Objectives</b> <ul style="list-style-type: none"> <li>• Price stability</li> <li>• Economic growth</li> <li>• Employment</li> <li>• Balance of payments</li> </ul>	<b>Government Policy</b> <ul style="list-style-type: none"> <li>• Fiscal</li> <li>• Monetary</li> <li>• Supply Side</li> </ul>	<b>Paper 2 practice</b> <ul style="list-style-type: none"> <li>• Multiple Choice</li> <li>• Step questions</li> <li>• Extended exam question (marked overnight)</li> </ul>
<b>Day 4</b>	<b>Global Economy</b> <ul style="list-style-type: none"> <li>• Trade Theory and Protectionism</li> <li>• Exchange Rates</li> <li>• Globalisation</li> </ul>	<b>Paper 2 practice</b> <ul style="list-style-type: none"> <li>• Government guidance 2021</li> <li>• Further Paper 2 practice</li> </ul>	<b>Paper 3</b> <ul style="list-style-type: none"> <li>• Technique</li> <li>• Case study, with exemplar</li> </ul>	<b>Paper 3</b> <ul style="list-style-type: none"> <li>• Run Through</li> <li>• Final questions</li> </ul>

Physics A LEVEL

	<u>Morning Sessions</u>		<u>Afternoon Sessions</u>	
	<b>Session 1</b> 9.30-11:00 am	<b>Session 2</b> 11:15-12:45pm	<b>Session 3</b> 1.15-2.45pm	<b>Session 4</b> 3.00-4.30pm
<b>Day 1</b>	<u>Measurements &amp; Their Errors</u> <ul style="list-style-type: none"> <li>Use of SI units &amp; their prefixes</li> <li>Limitation of physical measurements</li> <li>Estimation of physical quantities</li> </ul>	<u>Particles &amp; Radiation</u> <ul style="list-style-type: none"> <li>Constituents of the atom</li> <li>Stable &amp; unstable nuclei</li> <li>Particle interactions</li> <li>Classification of particles</li> <li>Quarks &amp; antiquarks</li> <li>Conservation laws</li> </ul>	<u>Electromagnetic Radiation &amp; Quantum Phenomena</u> <ul style="list-style-type: none"> <li>The photoelectric effect</li> <li>Collision of electrons with atoms</li> <li>Energy levels &amp; Photon emission</li> <li>Wave-particle duality</li> </ul>	<u>Exam Technique</u> <ul style="list-style-type: none"> <li>Dissecting exam questions</li> <li>Understand key words</li> <li>How to answer multiple choice questions</li> </ul>
<b>Day 2</b>	<u>Waves</u> <ul style="list-style-type: none"> <li>Progressive wave</li> <li>Longitudinal &amp; transverse waves</li> <li>Principle of superposition of waves and formation of stationary waves</li> <li>Refraction, diffraction &amp; interference</li> <li>Refraction at a plane surface</li> </ul>	<u>Force, Energy &amp; Momentum</u> <ul style="list-style-type: none"> <li>Scalars &amp; Vectors</li> <li>Moments</li> <li>Centre of mass</li> <li>Motion along a straight line</li> <li>Projectile Motion</li> <li>Newton's laws of motion</li> <li>Momentum</li> <li>Work, energy &amp; power</li> <li>Conservation of energy</li> </ul>	<u>Force, Energy &amp; Momentum</u> <ul style="list-style-type: none"> <li>Bulk property of solids</li> <li>The Young Modulus</li> </ul> <u>Electricity</u> <ul style="list-style-type: none"> <li>Basics of electricity</li> <li>Current-voltage traits</li> <li>Resistivity - Circuits</li> <li>Potential divider</li> <li>Electromotive force &amp; internal resistance</li> </ul>	<u>Exam Technique</u> <ul style="list-style-type: none"> <li>Tackling extended written questions</li> <li>Understanding experimental questions on uncertainties &amp; measurement techniques</li> <li>Extended exam question (marked overnight)</li> </ul>
<b>Day 3</b>	<u>Periodic Motion</u> <ul style="list-style-type: none"> <li>Circular motion</li> <li>Simple harmonic motion</li> <li>Simple harmonic systems</li> <li>Forced vibrations &amp; resonance</li> </ul>	<u>Thermal Physics</u> <ul style="list-style-type: none"> <li>Thermal energy transfer</li> <li>Ideal gases</li> <li>Molecular kinetic theory model</li> </ul>	<u>Fields &amp; Their Consequences</u> <ul style="list-style-type: none"> <li>Gravitational fields</li> <li>Electric fields</li> <li>Capacitance</li> <li>Magnetic fields</li> <li>Electromagnetic induction &amp; its applications</li> </ul>	<u>Exam Technique</u> <ul style="list-style-type: none"> <li>How to answer questions assessing practical skills</li> <li>Exam question (marked overnight)</li> </ul>
<b>Day 4</b>	<u>Nuclear Physics</u> <ul style="list-style-type: none"> <li>Radioactivity</li> <li>Nuclear instability</li> <li>Mass-energy</li> <li>Induced fission</li> </ul>	<u>Optional Units TBC</u>	<u>Optional Units TBC</u>	<u>Exam Technique</u> <ul style="list-style-type: none"> <li>Run Through</li> <li>Final questions</li> <li>AOB</li> </ul>

**Biology A LEVEL**Morning SessionsAfternoon Sessions**Session 1  
9.30-11:00 am****Session 2  
11:15-12:45pm****Session 3  
1.15-2.45pm****Session 4  
3.00-4.30pm****Day 1**

Biological molecules

Biological Molecules  
Cells

Cells

Organisms exchange substances  
with their environment**Day 2**Organisms exchange substances  
with their environment  
Genetic information

Genetic information

Paper 1 technique &amp; practice

Energy Transfers

**Day 3**

Energy transfers

Energy Transfer  
Responding to the  
environment

Responding to the environment

Genetics, populations, evolution  
and ecosystems**Day 4**Genetics, populations, evolution  
and ecosystems  
The control of gene expression

The control of gene expression

Paper 2 technique &amp; practice

Paper 3 technique & practice  
The essay