

## Varsity College Year 12 PHYSICS 2024

### Term 1

Week	Date	Topics	Assessment
1	22-26 January O-Week Australia Day PH Fri	<ul style="list-style-type: none"> <li>Orientation Week</li> </ul>	
2	29 Jan-2 Feb	<ul style="list-style-type: none"> <li>Electrostatics, Coulomb's law and Electric Fields</li> </ul>	
3	5-9 February Swimming Carnival - Thurs	<ul style="list-style-type: none"> <li>Electric Potential and Magnetic fields</li> </ul>	
4	12-16 February	<ul style="list-style-type: none"> <li>Magnetic fields and Solenoids</li> </ul>	
5	19-23 February	<ul style="list-style-type: none"> <li>The motor effect, Electromagnetic induction, Faraday's law and Lenz's Law</li> </ul>	
6	26 Feb-1 Mar GC24 - Wednesday	<ul style="list-style-type: none"> <li>Transformers and EMR</li> </ul>	
7	4-8 March	<ul style="list-style-type: none"> <li>Student Experiment – Plan and Conduct (IA2 1-2)</li> </ul>	IA2 Handed Out L1
8	11-15 March	<ul style="list-style-type: none"> <li>Student Experiment – Analyse and Evaluate (IA2 3-4)</li> </ul>	
9	18-22 March GC24 - Thursday	<ul style="list-style-type: none"> <li>Student Experiment – Analyse and Evaluate (IA2 5-6)</li> </ul>	
10	25-29 March Good Friday PH	<b>EXAM BLOCK</b>	
<b>School holidays: Friday March 29 - Sunday April 14</b>			

### Term 2

Week	Date	Topics	Assessment
1	15-19 April Cross Country - Wed	<ul style="list-style-type: none"> <li>Frames of Reference, Relative motion and</li> <li>Postulates of Special Relativity</li> <li>Student Experiment – Analyse and Evaluate (IA2 7)</li> </ul>	
2	22-26 April GC24 - Tuesday Anzac Day PH - Thurs	<ul style="list-style-type: none"> <li>Simultaneity</li> <li>Time dilation and relativity of time</li> </ul>	IA2 Draft Due L1
3	29 Apr-3 May	<ul style="list-style-type: none"> <li>Length contraction</li> <li>Rest mass and relativistic momentum</li> </ul>	
4	6-10 May Labour Day PH - Mon	<ul style="list-style-type: none"> <li>Paradoxes</li> <li>Student Experiment – Drafting Conferencing (IA2 8&amp;9)</li> </ul>	IA2 Draft Returned L2
5	13-17 May	<ul style="list-style-type: none"> <li>Young's double slit experiment</li> <li>Blackbody radiation</li> <li>Photons</li> </ul>	<b>IA2 Final Due L1</b>
6	20-24 May	<ul style="list-style-type: none"> <li>The photoelectric effect (2)</li> <li>Research Investigation – Plan and Conduct (IA3 1)</li> </ul>	IA3 Handed Out L1
7	27-31 May	<ul style="list-style-type: none"> <li>Research Investigation – Plan and Conduct (IA3 2&amp;4)</li> </ul>	
8	3-7 June	<ul style="list-style-type: none"> <li>Research Investigation – Analyse and Interpret (IA3 5-6)</li> </ul>	
9	10-14 June GC24 - Wednesday	<ul style="list-style-type: none"> <li>Research Investigation – Evaluate and Conclude (IA3 7)</li> <li>The Compton effect</li> </ul>	IA3 Draft Due L1
10	17-21 June Exam: Mon am + Wed pm Athletics Carnival - Thurs	<ul style="list-style-type: none"> <li>Rutherford's model of the atom</li> </ul>	
<b>School holidays: Saturday June 22 - Sunday July 7</b>			

### Term 3

Week	Date	Topics	Assessment
1	8-12 July	<ul style="list-style-type: none"> <li>Bohr's model of the atom</li> <li>Atomic spectra</li> <li>Research Investigation – Drafting Conferencing (IA2 8&amp;9)</li> </ul>	IA3 Draft Returned L1
2	15-19 July	<ul style="list-style-type: none"> <li>Quantum theory consolidation</li> </ul>	IA3 Final Due L1
3	22-26 July GC24 - Thursday	<ul style="list-style-type: none"> <li>Quarks, Hadrons and Leptons</li> <li>Bosons and forces</li> <li>Particle interactions</li> </ul>	
4	29 Jul- 2 Aug Exam: Wed + Fri pm	<ul style="list-style-type: none"> <li>Feynman diagrams</li> <li>Symmetry in particle interactions</li> <li>Standard model consolidation</li> </ul>	
5	5-9 August	<ul style="list-style-type: none"> <li>Revision – Gravity and Motion</li> </ul>	
6	12-16 August GC24 Finals – Wed.	<ul style="list-style-type: none"> <li>Revision – Electromagnetism</li> </ul>	
7	19-23 August	<ul style="list-style-type: none"> <li>Revision – Special Relativity</li> </ul>	
8	26-30 August	<ul style="list-style-type: none"> <li>Revision – Quantum theory</li> </ul>	
9	2-6 September	<b>MOCK EXAMS</b>	2 x 90min Exams
10	9-13 September	<b>MOCK EXAMS</b>	
<b>School holidays: Saturday September 14 – Sunday September 29</b>			

### Term 4

Week	Date	Topics	Assessment
1	30 Sept – 4 Oct	<ul style="list-style-type: none"> <li>Mock exam analysis</li> </ul>	
2	7-11 October King's B'day PH - Monday	<ul style="list-style-type: none"> <li>Revision of Unit 3 and 4</li> </ul>	
3	14-18 October	<ul style="list-style-type: none"> <li>Revision of Unit 3 and 4</li> </ul>	
4	21 Oct-15 Nov.	<b>EXTERNAL EXAMS</b>	<b>External Assessment: Unit 3 and 4</b>
5	28 Oct – 1 Nov		
6	4-8 November		
7	11-15 November	<b>Final Week Events</b>	