

## Varsity College Year 12 Physics 2023

### Term 1, 2023

| Week   | Date                                      | Topics   | Assessment        |
|--|---|--|-------------------|
| 1  | 23-27 January<br>Australia Day PH - Thurs | <ul style="list-style-type: none"> <li>Electrostatics and Coulomb's Law</li> </ul>   |                   |
| 2  | 30 Jan – 3 Feb<br>Swimming Carnival - Mon | <ul style="list-style-type: none"> <li>Electric Fields and Electric Potential</li> </ul>   |                   |
| 3  | 6-10 February                             | <ul style="list-style-type: none"> <li>Magnetic fields</li> </ul>  |                   |
| 4  | 13-17 February                            | <ul style="list-style-type: none"> <li>Magnetic fields &amp; Introduction to Electromagnetic Induction</li> </ul>                        |                   |
| 5  | 20-24 February                            | <ul style="list-style-type: none"> <li>Flux, EMF, Faraday's law and Lenz's Law</li> </ul>  |                   |
| 6  | 27 Feb – 3 Mar                            | <ul style="list-style-type: none"> <li>Transformers and EMR</li> </ul>   |                   |
| 7  | 6-10 March<br>GIPSA - Wednesday           | <ul style="list-style-type: none"> <li>Student Experiment – Plan and Conduct (IA2 1-3)</li> </ul>  | IA2 Handed Out L1 |
| 8  | 13-17 March                               | <ul style="list-style-type: none"> <li>Frames of Reference, Relative motion and</li> <li>Postulates of Special Relativity (3)</li> </ul> |                   |
| 9  | 20-24 March                               | <ul style="list-style-type: none"> <li>Student Experiment – Analyse and Evaluate (IA2 4-6)</li> </ul>                                    |                   |
| 10   | 27-31 March<br>Cross Country - Thurs      | <b>Exam Block</b>  |                   |
| <b>School Holidays: Saturday April 1 – Sunday April 16</b> |   |  |                   |

### Term 2, 2023

| Week   | Date  | Topics  | Assessment            |
|--|---|---|-----------------------|
| 1  | 17-21 April<br>Athletics Carnival - Wednesday               | <ul style="list-style-type: none"> <li>Simultaneity (2)</li> <li>Student Experiment – Analyse and Evaluate (IA2 7)</li> </ul>                                       |                       |
| 2  | 24-28 April<br>ANZAC Day PH - Tues                          | <ul style="list-style-type: none"> <li>Time dilation and Length Contraction (3)</li> </ul>  | IA2 Draft Due L1      |
| 3  | 1-5 May<br>Labour Day PH - Monday<br>GIPSA - Wednesday      | <ul style="list-style-type: none"> <li>Rest mass and relativistic momentum (3)</li> </ul>   |                       |
| 4  | 8-12 May  | <ul style="list-style-type: none"> <li>Paradoxes (1)</li> <li>Student Experiment – Drafting Conferencing (IA2 8&amp;9)</li> </ul>                                   | IA2 Draft Returned L2 |
| 5  | 15-19 May<br>GIPSA - Wednesday                              | <ul style="list-style-type: none"> <li>Wave model of light and Black body radiation</li> </ul>  | IA2 Final Due L1      |
| 6  | 22-26 May<br>GIPSA - Wednesday                              | <ul style="list-style-type: none"> <li>Photons and Photoelectric Effect (2)</li> <li>Research Investigation – Plan and Conduct (IA3 1)</li> </ul>                   | IA3 Handed Out L1     |
| 7  | 29 May – 2 June   | <ul style="list-style-type: none"> <li>Wave and particle characteristics of photons (1)</li> <li>Research Investigation – Plan and Conduct (IA3 2&amp;3)</li> </ul> |                       |
| 8  | 5-9 June<br>Exam Block – Tuesday L1, 2<br>GIPSA - Wednesday | <ul style="list-style-type: none"> <li>Research Investigation – Analyse and Interpret (IA3 4-6)</li> </ul>  |                       |
| 9  | 12-16 June  | <ul style="list-style-type: none"> <li>Rutherford's model of the atom (2)</li> <li>Research Investigation – Evaluate and Conclude (IA3 7)</li> </ul>                | IA3 Draft Due L1      |
| 10   | 19-23 June  | <ul style="list-style-type: none"> <li>Bohr's Model of the atom (3)</li> </ul>  |                       |
| <b>School Holidays: Saturday June 24 – Sunday July 9</b> |   |   |                       |

### Term 3, 2023

| Week  | Date  | Topics  | Assessment            |
|---|---|---|-----------------------|
| 1   | 10-14 July                                  | <ul style="list-style-type: none"> <li>Wave-particle duality (1)</li> <li>Research Investigation – Drafting Conferencing (IA2 8&amp;9)</li> </ul> | IA3 Draft Returned L2 |
| 2   | 17-21 July                                  | <ul style="list-style-type: none"> <li>Quantum Theory (3)</li> </ul>  | IA3 Final Due L1      |
| 3   | 24-28 July                                  | <ul style="list-style-type: none"> <li>The standard model</li> </ul>  |                       |
| 4   | 31 July – 4 August<br>Exam Block - Thursday | <ul style="list-style-type: none"> <li>The standard model</li> </ul>  |                       |
| 5   | 7-11 August                                 | <ul style="list-style-type: none"> <li>Revision</li> </ul>  |                       |
| 6   | 14-18 August                                | <ul style="list-style-type: none"> <li>Revision</li> </ul>  |                       |
| 7   | 21-25 August                                | <ul style="list-style-type: none"> <li>Revision</li> </ul>  |                       |
| 8   | 28 August – 1 Sept.                         | <ul style="list-style-type: none"> <li>Revision</li> </ul>  |                       |
| 9   | 4-8 September                               | Mock Exams  | 90min Exam            |
| 10  | 11-15 September                             | Mock Exams  |                       |
| School Holidays: Saturday September 16 – Monday October 2 |   |   |                       |

### Term 4, 2023

| Week | Date                                     | Topics  | Assessment                        |
|------|--|---|-----------------------------------|
| 1    | 2-6 October<br>Queen's Birthday PH - Mon | <ul style="list-style-type: none"> <li>Mock Exam results and feedback</li> <li>EA preparation and revision</li> </ul>                           |                                   |
| 2    | 9-13 October                             | <ul style="list-style-type: none"> <li>EA preparation and revision</li> </ul>   |                                   |
| 3    | 16-20 October                            | <ul style="list-style-type: none"> <li>No classes for Applied and Certificate subjects.</li> <li>Study lessons for General subjects.</li> </ul> |                                   |
| 4    | 23-27 October                            | External Exam Block   | External Assessment: Unit 3 and 4 |
| 5    | 30 Oct – 3 Nov                           |   |                                   |
| 6    | 6-10 November                            |   |                                   |
| 7    | 13-17 November                           | Graduation  |                                   |