# Sample Scope and Sequence: Physics – Year 12

***Sample for implementation for Year 12 from Term 4, 2018***

| **Term 4** | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** | **Week 10** |
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| **Module 5: Advanced Mechanics**  Students investigate complex kinematic situations involving multiple dimensions and varying force components. Students study projectile motion and circular motion, among others. | | | | | | | **Module 6: Electromagnetism** | | |
| PH11/12-4, PH11/12-5, PH11/12-6, PH11/12-7, PH12-12 | | | | | | | PH11/12-1, PH11/12-2, PH11/12-3, PH11/12-4, PH11/12-5, PH12-13 | | |

| **Term 1** | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** | **Week 10** |
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| **Module 6: Electromagnetism**  Students investigate the interactions that take place between charged particles and electric/magnetic fields, including their application in electricity production and their uses in motors. | | | | | | **Module 7: The Nature of Light** | | | |
| 5 hours of Depth Study | | | | | |  | | | |
| PH11/12-1, PH11/12-2, PH11/12-3, PH11/12-4, PH11/12-5, PH11/12-7, PH12-13 | | | | | | PH11/12-1, PH11/12-2, PH11/12-3, PH11/12-4, PH11/12-7, PH12-14 | | | |

| **Term 2** | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** | **Week 10** |
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| **Module 7: The Nature of Light**  Students investigate theories of light and the significant and profound modifications as a result of the quantum theory. The properties of light and their consequences are explored in relativity and applications of the quantum theory. | | | | | | **Module 8: From the Universe to the Atom**  Students explore the theories of the probable origins of the universe and the machinations of its components. | | | |
| 5 hours of Depth Study | | | | | |  | | | |
| PH11/12-1, PH11/12-2, PH11/12-3, PH11/12-4, PH11/12-7, PH12-14 | | | | | | PH11/12-5, PH11/12-6, PH11/12-7, PH12-15 | | | |

| **Term 3** | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** | **Week 10** |
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| **Module 8: From the Universe to the Atom**  This is then explored in the context of the smallest units of matter and the theories underpinning our understanding of physics at the smallest scales. | | | | | | | | | |
| PH11/12-1, PH11/12-5, PH11/12-6, PH11/12-7, PH12-15 | | | | | | | | | |
| 5 hours of Depth Study | | | | | | | | | |