 Physics science scope and sequence

This document references the [Physics Stage 6 Syllabus](https://syllabus.nesa.nsw.edu.au/physics-stage6/) © 2017 [NSW Education Standards Authority (NESA)](http://syllabus.nesa.nsw.edu.au/copyright/) for and on behalf of the Crown in right of the State of New South Wales.

Year 11

Term 1

| Week | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Content focus | Module 1 Kinematics | Module 1 Kinematics | Module 1 Kinematics | Module 1 Kinematics | Module 1 Kinematics | Module 1 Kinematics | Module 2  Dynamics | Module 2  Dynamics | Module 2  Dynamics | Module 2  Dynamics |
| Working Scientifically | PH11- 2,3,4,5,6 | PH11- 2,3,4,5,6 | PH11- 2,3,4,5,6 | PH11- 2,3,4,5,6 | PH11- 2,3,4,5,6 | PH11- 2,3,4,5,6 | PH11- 2,4,6 | PH11- 2,4,6 | PH11- 2,4,6 | PH11- 2,4,6 |
| Outcomes | PH11- 8 | PH11- 8 | PH11- 8 | PH11- 8 | PH11- 8 | PH11- 8 | PH11- 9 | PH11- 9 | PH11- 9 | PH11- 9 |
| Assessment | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Term 2

| Week | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Content focus | Module 2  Dynamics | Module 2  Dynamics | Module 2  Dynamics | Module 3  Wave introduction | Module 3  Music | Module 3  Music | Module 3  Music | Module 3  Music | Module 3  Light/  Thermodynamics | Module 3  Thermodynamics |
| Working Scientifically | PH11- 2,4,6 | PH11- 2,4,6 | PH11- 2,4,6 | PH11- 3,4,6,7 | PH11- 3,4,6,7 | PH11- 3,4,6,7 | PH11- 3,4,6,7 | PH11- 3,4,6,7 | PH11- 1,3,4,6,7 | PH11- 1,3,4,6,7 |
| Outcomes | PH11- 9 | PH11- 9 | PH11- 9 | PH11- 10 | PH11- 10 | PH11- 10 | PH11- 10 | PH11- 10 | PH11- 10 | PH11- 10 |
| Assessment | N/A | N/A | Practical Investigation | N/A | N/A | N/A | N/A | N/A | Pretesting of stage 5 knowledge  Depth Study (15 hours over 4 weeks) | Depth Study (15 hours over 4 weeks) |

Term 3

| Week | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Content focus | Module 3  Light/  Thermodynamics | Module 3  Thermodynamics | Module 4 | Module 4 | Module 4 | Module 4 | Module 4 | Module 4 | End of Year Assessment | End of Year Assessment |
| Working Scientifically | PH11- 1,3,4,6,7 | PH11- 1,3,4,6,7 | PH-1,5,7 | PH-1,5,7 | PH-1,5,7 | PH-1,5,7 | PH-1,5,7 | PH-1,5,7 | N/A | N/A |
| Outcomes | PH11- 10 | PH11- 10 | PH11-11 | PH11-11 | PH11-11 | PH11-11 | PH11-11 | PH11-11 | N/A | N/A |
| Assessment | Depth Study (15 hours over 4 weeks) | Depth Study (15 hours over 4 weeks) | N/A | N/A | N/A | N/A | N/A | N/A | End of Course Examination | End of Course Examination |

Year 11 Depth Study is completed as a single depth study, integrated into the Thermodynamics section, developing modelling skills. The depth study must be allocated a minimum of 15 hours.

Year 12

Term 4

| Week | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Content focus | Module 5 | Module 5 | Module 5 | Module 5 | Module 5 | Module 5 | Module 5 | Module 5 | Module 6 | Module 6 |
| Working Scientifically | PH12-4,5,6,7 | PH12-4,5,6,7 | PH12-4,5,6,7 | PH12-4,5,6,7 | PH12-4,5,6,7 | PH12-4,5,6,7 | PH12-4,5,6,7 | PH12-4,5,6,7 | PH12-1,2.3.4,5 | PH12-1,2.3.4,5 |
| Outcomes | PH12-12 | PH12-12 | PH12-12 | PH12-12 | PH12-12 | PH12-12 | PH12-12 | PH12-12 | PH12-13 | PH12-13 |
| Assessment | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Practical Assessment Task | N/A | N/A |

Term 1

| Week | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Content focus | Module 6 | Module 6 | Module 6 | Module 6 | Module 6 | Module 6 | Module 7 | Module 7 | Module 7 | Module 7 |
| Working Scientifically | PH12-1,2.3.4,5 | PH12-1,2.3.4,5 | PH12-1,2.3.4,5 | PH12-1,2.3.4,5 | PH12-1,2.3.4,5 | PH12-1,2.3.4,5 | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 |
| Outcomes | PH12-13 | PH12-13 | PH12-13 | PH12-13 | PH12-13 | PH12-13 | PH12-14 | PH12-14 | PH12-14 | PH12-14 |
| Assessment | N/A | N/A | N/A | N/A | N/A | N/A | Second Hand Research Task | N/A | N/A | N/A |

Term 2

| Week | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Content focus | Module 7 | Module 7 | Module 7 | Module 7 | Module 7 | Module 7 | Depth  Study | Depth  Study | Module 8 | Module 8 |
| Working Scientifically | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 | PH12-1,2.3.4,7 | PH12-1,3.4,7 | PH12-1,3.4,7 | PH12-5,6,7 | PH12-5,6,7 |
| Outcomes | PH12-14 | PH12-14 | PH12-14 | PH12-14 | PH12-14 | PH12-14 | PH12-14 | PH12-14 | PH12-15 | PH12-15 |
| Assessment | N/A | N/A | N/A | Depth  Study (15 hours over 5 weeks) | Depth  Study (15 hours over 5 weeks) | Depth  Study (15 hours over 5 weeks) | Depth  Study (15 hours over 5 weeks) | Depth  Study (15 hours over 5 weeks) | Pretesting on exponentials | N/A |

Term 3

| Week | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Content focus | Assessment Week | Assessment Week | Module 8 | Module 8 | Module 8 | Module 8 | Module 8 | Module 8 | Depth Study | Depth Study |
| Working Scientifically | N/A | N/A | PH12-5,6,7 | PH12-5,6,7 | PH12-5,6,7 | PH12-5,6,7 | PH12-5,6,7 | PH12-5,6,7 | PH12-1,5,6,7 | PH12-1,5,6,7 |
| Outcomes | N/A | N/A | PH12-15 | PH12-15 | PH12-15 | PH12-15 | PH12-15 | PH12-15 | PH12-1,5,6,7 | PH12-1,5,6,7 |
| Assessment | Trial Examination | Trial Examination | N/A | N/A | N/A | N/A | N/A | N/A | Informal assessment | Informal assessment |

Year 12 Depth Study is split into two segments, to enable the depth studies to be used for student reflection and student determination. Only the Depth study 1 is assessed as part of the formal assessment program. A minimum of 15 hours must be allocated to depth studies.