Year 12 Physics

Work rate calendar (WRC) 2024 — Term 1

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.
Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	22 Jan – 26 Jan	Unit 3: Gravity and Electromagnetism	Monday 22 January — Welcome calls for students: Prep – Year 12 Wednesday 24 January — Learning for success: Prep – Year 12 Friday 26 January — Australia Day Holiday **Electric potential and energy** Electrostatics review	**Chapter 6.3 and Chapter 6 review** **QLearn Review Quiz** **Supervisor Safety Declaration** **Due Friday 26 January**
2	29 Jan – 2 Feb		**Magnetic fields** Magnetic field strength Solenoids	**Chapter 7.1, 7.2 and 7.3** **QLearn Review Quiz**
3	5 Feb – 9 Feb		Friday 9 February — Senior orientation day: Years 10–12 **Force on a moving charge** Force on a moving charge in a uniform magnetic field Mandatory practical 7.4	**Chapter 7.4** **QLearn Review Quiz**
4	12 Feb – 16 Feb		**Data test revision**	**QLearn Review Quiz** **Mandatory Practical 7.4 due** **IA1 Practice Test** **Due Friday 16 February**
5	19 Feb – 23 Feb		**Data test revision** Review unit 3	**QLearn Review Quiz** **IA1 — Data Test** **Due Friday 23 February**
6	26 Feb – 1 Mar		**IA2 Student Experiment** Analyse sample report, write rationale and methodology Magnetic flux	**Chapter 8.1** **QLearn Review Quiz** **IA2 Check point: Student Experiment rationale and method** **Due Friday 1 March**
7	4 Mar – 8 Mar		**IA2 Student Experiment** Data collection, processing and analysis, and report writing	
8	11 Mar – 15 Mar		**Electromagnetic induction** Lenz's Law	**QLearn Review Quiz** **Chapter 8.2 and 8.3**
9	18 Mar – 22 Mar		**Exams: Year 11** Monday 18 March – Friday 22 March **IA2 Student Experiment** Applying draft feedback Electromagnetic induction — transformers	**QLearn Review Quiz** **Chapter 8.4** **IA2 Student Experiment draft** **Due Friday 22 March**
10	25 Mar – 29 Mar		Thursday 28 March — Cross country / Fun run: Prep – Year 12 Friday 29 March — Good Friday **Electromagnetic radiation and unit 3 review**	**QLearn Review Quiz** **Chapter 8.5 and Chapter 8 review**

LEGEND | Class work — send-in | Summative assessment | Exam block | School events | Public holidays | Student free day

Year 12 Physics

Work rate calendar (WRC) 2024 — Term 2

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	15 Apr – 19 Apr	Unit 4: Revolutions in Modern Physics	**Special relativity** Inertial frames of reference and relative motion	**QLearn Review Quiz** **Chapter 9.1 and 9.2**
2	22 Apr – 26 Apr		Thursday 25 April — Anzac Day **Special relativity** Simultaneity and relativity of time	**QLearn Review Quiz** **Chapter 9.3 and 9.4** **IA2 – Student Experiment Final** **Due Friday 26 April**
3	29 Apr – 3 May		**IA3 Research Investigation** Special relativity — relativity of length, relativistic momentum, and mass to energy conversions	**QLearn Review Quiz** **Chapter 10.1, 10.2 and 10.3**
4	6 May – 10 May		Monday 6 May — Labour Day **Special Relativity** Paradoxical scenarios Quantum theory: light, blackbody radiation, and Young's Double-slit experiment	**QLearn Review Quiz** **Chapter 10.4, 11.1, 11.2 and 11.3**
5	13 May – 17 May		**Quantum theory** Research Investigation	**QLearn Review Quiz** **Chapter 11.4, 11.5 and 11.6** **IA3 Research Investigation Checkpoint 1 – submit research question** **Due Friday 17 May**
6	20 May – 24 May		**Quantum Theory** The photoelectric effect and momentum Research Investigation	**QLearn Review Quiz** **IA3 – Checkpoint 2** **Due Friday 24 May**
7	27 May – 31 May		**Special Relativity review** Research Investigation Analysing two exemplars	**Chapter 10 review**
8	3 Jun – 7 Jun		**Quantum Theory review** Chapter 11 Review	**QLearn Review Quiz** **IA3 – Research Investigation draft** **Due Friday 7 June**
9	10 Jun – 14 Jun		Monday 10 June – Thursday 13 June — School camp: Year 11 **Quantum theory and Rutherford's model of the atom** Mandatory Practical 11.5: The Photoelectric Effect	**QLearn Review Quiz** **Chapter 12.1**
10	17 Jun – 21 Jun		Thursday 20 June — Senior formal: Year 12 Friday 21 June — Athletics carnival / Sports day: Prep – Year 12 **Quantum theory — Bohr's model of the atom** IA3 Research Investigation - apply draft feedback	**QLearn Review Quiz** **Chapter 12.2** **Mandatory Practical 11.5** **Due Friday 21 June**

LEGEND: Class work — send-in | Summative assessment | Exam block | School events | Public holidays | Student free day

Year 12 Physics

Work rate calendar (WRC) 2024 Term 3

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.
Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	8 Jul – 12 Jul	Unit 4: Revolutions in Modern Physics	**Quantum theory — wave-particle duality of light and Photons** IA3 Research Investigation — apply draft feedback	**QLearn Review Quiz Chapter 12.3**
2	15 Jul – 19 Jul		**Review Unit 4 Topics 1 and 2** IA3 Research Investigation	**IA3 Research Investigation Final Due Friday 19 July**
3	22 Jul – 26 Jul		**The Standard Model** Matter and antimatter, and bosons	**QLearn Review Quiz Chapter 13.1 and 13.2**
4	29 Jul – 2 Aug		**The Standard Model** Boson, fundamental forces, and particle interactions	**QLearn Review Quiz Chapter 14.1 and 14.2**
5	5 Aug – 9 Aug		**The Standard Model** Conservation in interactions, Feynman diagrams, symmetry in particle interaction	**QLearn Review Quiz Chapter 14.3 Chapter 14 review**
6	12 Aug – 16 Aug	Unit 3 and 4	Wednesday 14 August — Royal Queensland (Ekka) Show Holiday **Unit 4 review**	**Unit 4 exam-style questions Unit 4 oBook practice exam**
7	19 Aug – 23 Aug		**Unit 3 review**	**Unit 4 exam-style questions Unit 4 oBook practice exam**
8	26 Aug – 30 Aug		**Mock exams: Year 12** Monday 26 August – Thursday 29 August Friday 30 August — Student free day	
9	2 Sept – 6 Sept		**Mock exams: Year 12** Monday 2 September – Friday 6 September	
10	9 Sept – 13 Sept		**Exams: Year 11** Monday 9 September – Thursday 12 September Friday 13 September — Connect excursion: Years 10–12 **Unit 3 and 4 revision**	**Unit 3 and 4 oBook practice Exams NEAP practice exam**

Disclaimer: Information contained in this document is correct at time of publishing.

LEGEND | Class work — send-in | Summative assessment | Exam block | School events | Public holidays | Student free day

Year 12 Physics

Work rate calendar (WRC) 2024 Term 4

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.
Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	30 Sept – 4 Oct	Unit 3 and 4	**Unit 3 and 4 revision** Mock exam feedback	
2	7 Oct – 11 Oct		Monday 7 October — King's Birthday Holiday **Unit 3 and 4 revision**	**Second practice mock exam**
3	14 Oct – 18 Oct		**Unit 3 and 4 revision**	**Third practice mock exam**
4	21 Oct – 25 Oct		**Exams: Year 12** Monday 21 October – Friday 25 October	
5	28 Oct – 1 Nov		**Exams: Year 12** Monday 28 October – Friday 1 November	
6	4 Nov – 8 Nov		**Exams: Year 12** Monday 4 November – Friday 8 November	
7	11 Nov – 15 Nov		**Exams: Year 12** Monday 11 November – Wednesday 13 November Thursday 14 November — Graduation: Year 12 Friday 15 November — Final day: Year 12	

LEGEND | Class work — send-in | Summative assessment | Exam block | School events | Public holidays | Student free day