

PSC315118 Physical Sciences

15 TCE Points



You will work through the following units as part of Physical Sciences 3

- atoms and nuclear reactions (Criterion 4)
- motion and force (Criterion 5)
- conservation laws in physics (Criterion 6)
- chemical fundamentals: structures and properties (Criterion 7)
- principles of chemical reactions and reacting quantities (Criterion 8).

You will also:

- undertake, interpret and analyse experiments and investigations (Criterion 2)
- analyse the application and impact of physical science in society (Criterion 3)

How you'll be assessed:

Common types of internal assessments are:

- Tests
- Essays
- Laboratory reports
- Online quizzes

The external assessment for this subject is a written examination assessing criteria: 4, 5, 6, 7 and 8.

The dates for external exams in November are non-negotiable.

COMPLETION OF WORK

Assessment due dates are provided in the Program of Learning and on Canvas. Work must be submitted by the due date unless an approved extension has been granted. Unapproved late submissions will incur penalties as outlined in the *Completion of Work Policy*. Students needing extensions should contact their subject teacher before the due date with valid reasons, such as illness or unforeseen circumstances.

For more details refer to the Launceston College: [Completion of Work Policy](#).

ACADEMIC INTEGRITY

All senior secondary students in Tasmania are expected to uphold academic integrity, meaning they complete their work honestly and fairly. This includes properly referencing any ideas, images, or information borrowed from others, allowing teachers to distinguish between original and sourced content.

Assignments will be submitted through Canvas, email, hard copy as directed in the task sheet.

For more details, refer to the Launceston College: [Academic Integrity Policy](#).

REFERENCING

The Harvard referencing system is recommended for Physical Sciences 3. The standards for criterion 1 state that a student must:

- create appropriate reference lists/bibliographies and use in-text referencing.
- clearly identifies the information, images, ideas and words of others used in the student's work.

COURSE DOCUMENT

The TASC website provides considerable information about the course. [Physical Sciences - TASC](#)

OTHER COURSE REQUIREMENTS

A scientific calculator. [External Assessment Rules and Calculator Policy - TASC](#)

Week	Date	Program of Learning 2025	Notes / Assessments
1	6 Feb	Atomic Structure	Yr 11s and 12's return February 8 (Thursday)
2	10 Feb	Relative atomic mass, Periodic Table trends	
3	17 Feb	Nuclear Physics: α , β , and γ radiation, nuclear equations, half-life calculations, fission reactions	
4	24 Feb		Wed 26 Feb – Launceston Cup Criterion 4: Unit Test
5	3 Mar	Structure and properties of materials: metallic, ionic, covalent molecular, covalent network and covalent layer lattice bonding models	
6	10 Mar		Mon 10 Mar – Public Holiday
7	17 Mar	Organic chemistry	
8	24 Mar		Criterion 7: Structure and properties of materials Test
9	31 Mar	Electricity	
10	7 Apr		Criterion 6: Electricity Test
Term 1 break – Saturday 12 April – Sunday 27 April			
1	28 Apr	Motion: Scalar and vector quantities, equations of motion (inc. vertical motion under gravity), motion graphs	
2	5 May		
3	12 May	Projectile motion	
4	19 May	Forces and Newton's Laws (inc. force diagrams and calculations), momentum	
5	26 May		Criterion 5: Unit Test
6	2 June	Conservation of momentum	
7	9 June		Mon 9 June – Public Holiday
8	16 June	Mid-year exam revision	
9	23 June		Mid-Year Assessments Level 3 & 4
10	30 June		Mid-Year Assessments Level 3 & 4
Term 2 break – Saturday 5 July – Sunday 20 July			
1	21 July	Solubility of ionic compounds, precipitation reactions	Criterion 7: Unit Test
2	28 July	Chemical reactions and quantities: properties and reactions of acids and the pH scale	
3	4 Aug		
4	11 Aug	The mole concept, percentage composition, empirical and molecular formulae	
5	18 Aug		
6	25 Aug	Stoichiometry: mass-mass calculations, concentration and dilution, titrations, mass-volume calculations	
7	1 Sep		Criterion 8: Unit Test
8	8 Sep	Work, Power and Energy (inc. conservation of energy and energy transformations)	
9	15 Sep		Criterion 6: Unit Test
10	22 Sep	Final Tests	
Term 3 break – Saturday 27 September – Sunday 12 October			
1	13 Oct	Final Tests	
2	20 Oct	Revision and Exam Practice	
3	27 Oct		
4	3 Nov		Mon 3 Nov – Public Holiday
Exams begin (Monday 10 th November) - Exams end (Thursday 20 th November)			

Please note: Dates and assessments are subject to change.

ASSESSMENT

Criterion-based assessment helps students see how well they're meeting course outcomes at the end of their study. While there is continuous feedback to guide learning, final assessments focus on showing what students have achieved by the end. Ratings are given as 'A', 'B', or 'C', based on course standards. A 't' indicates partial achievement below a 'C', and a 'z' means no evidence provided.

Schools follow TASC's quality assurance to keep standards consistent. More details are on the [TASC website](#). Final awards are based on both internal and TASC-supervised external assessments.

Criteria

The assessment for *Physical Sciences* Level 3 will be based on the degree to which the learner can:

1. apply skills to plan, organise, and communicate
2. undertake, interpret and analyse physical science experiments
3. analyse the application and impact of physical sciences in society
4. apply concepts and processes of atomic properties and nuclear reactions*
5. apply concepts and processes of motion and force*
6. apply concepts and processes of conservation in physics*
7. apply concepts and processes of chemical structures and properties*
8. apply concepts and processes of chemical reactions and reacting quantities.*

* = denotes criteria that are both internally and externally assessed

Award Requirements

The final award will be determined by the Office of Tasmanian Assessment, Standards and Certification from 13 ratings (8 from the internal assessment, 5 from external assessment).

The minimum requirements for an award in *Physical Sciences* Level 3 are as follows:

EXCEPTIONAL ACHIEVEMENT (EA)

11 'A' ratings, 2 'B' ratings (4 'A' ratings, 1 'B' rating from external assessment)

HIGH ACHIEVEMENT (HA)

5 'A' ratings, 5 'B' ratings, 3 'C' ratings (2 'A' rating, 2 'B' ratings and 1 'C' rating from external)

COMMENDABLE ACHIEVEMENT (CA)

7 'B' ratings, 5 'C' ratings (2 'B' ratings, 2 'C' ratings from external assessment)

SATISFACTORY ACHIEVEMENT (SA) - 11 'C' ratings (3 'C' ratings from external assessment)

PRELIMINARY ACHIEVEMENT (PA) - 6 'C' ratings

A student who otherwise achieves the ratings for a CA (Commendable Achievement) or SA (Satisfactory Achievement) award but who fails to show any evidence of achievement in one or more criteria ('z' notation) will be issued with a PA (Preliminary Achievement) award.