

BIO315124

Biology

15 TCE Points



You will work through the following units as part of Biology 3

Unit 1: Scientific Method and science as a human endeavour

Apply the scientific method to learning about the chemistry of life and science and society, then develop your own experiment to deepen your knowledge.

Unit 2: Regulation of cells and systems

Learn about cellular metabolism and Homeostasis.

How do organisms maintain constant internal conditions suited to life?

Unit 3: Continuity and change

Cell division, genetics and evolution. Lines of Defence and Immunity.

Learn about how organisms grow, reproduce and how populations change over time. How does the human body prevent and fight against infection and disease? Discover our 3 lines of defence, active and passive immunity.

How you'll be assessed:

Common types of internal assessments are:

- Short in-class essays
- Experimental reports
- Assignments
- Class tests and
- Exams

How you will be successful in this subject:

- Requires literacy skills for short answers and essays
- Focus on data analysis and key fact retention
- Strong research and writing skills are essential

The external assessment for this subject is a 3 hour exam. The dates for external exams in November are non-negotiable.

COMPLETION OF WORK POLICY

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 Biology 3. The standards for criterion 2 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: [Biology - TASC](#)

OTHER COURSE REQUIREMENTS

Biology 3 requires that you work safely in a Laboratory environment, you must be aware of and adhere to the safety requirements of any experiments that you participate in.

Week	Date	Program of Learning 2025	Notes / Assessments	Practical activities
1	6 Feb	Intro- Biology, Cells and C3 Scientific method	<i>Yr 11s and 12's return February 8 (Thursday)</i>	
2	10 Feb	Hypotheses, procedures, materials, data		Microscopy – Animal and plant cells
3	17 Feb	Management, ethics, evaluation of enquiries		Heterotrophic vs Autotrophic nutrition
4	24 Feb	C5 Regulation of biological systems	<i>Wed 26 Feb – Launceston Cup HeLa Cells Science and Society</i>	<i>Enzymes</i>
5	3 Mar	Enzymes, Cellular Respiration	Experimental report – Enzymes C3 Assignment	Cellular respiration
6	10 Mar	Photosynthesis	<i>Mon 10 Mar – Public Holiday</i> C3 TEST	<i>Photosynthesis- light intensity, leaf disks</i>
7	17 Mar	DNA structure, function and replication		
8	24 Mar	Protein synthesis and mutations	DRAFT -Independent investigation	
9	31 Mar	Gene expression and regulation		
10	7 Apr	INDEPENDENT INVESTIGATIONS	C5 Test	
Term 1 break – Saturday 12 April – Sunday 27 April				
1	28 Apr	INDEPENDENT INVESTIGATIONS		
2	5 May	C6 Homeostasis		
3	12 May	Water regulation in plants		How water moves through plants Plant water adaptations
4	19 May	Stimulus response model Positive and Negative feedback Neurones and action potential	C6 Assignment	Touch receptors
5	26 May	Osmoregulation and excretion		Kidney examination
6	2 June	Glucose regulation		
7	9 June	Thermoregulation	<i>Mon 9 June – Public Holiday</i> C6 Test	
8	16 June	C6 revision		<i>Tue 17 June – Orientation Day (LC students work from home)</i>
9	23 June	Mid-Year Assessments Level 3 & 4		
10	30 June			
Term 2 break – Saturday 5 July – Sunday 20 July				
1	21 July	C8 – Cell division, genetics and evolution, meiosis and mitosis Genetics- autosomal, sex-linked, codominant and incomplete		Observing mitosis – onion root tips
2	28 July	Multiple alleles (blood types), Punnett Squares di-hybrid crosses, pedigree analysis	C8 Assignment	
3	4 Aug	Evolution		Antibiotic resistance- Agar plates
4	11 Aug	C7 – Organisms response to pathogens	C8 Test	
5	18 Aug	Diseases and pathogens, transmission, prevention and cures		
6	25 Aug	3 lines of defense		
7	1 Sep	Innate immunity	C7 Assignment	
8	8 Sep	Adaptive/ specific immunity		
9	15 Sep	Types of immunity active v passive, natural v artificial		
10	22 Sep		C7 Test	
Term 3 break – Saturday 27 September – Sunday 12 October				
1	13 Oct	Final Assessments		
2	20 Oct	Review Program		
3	27 Oct		<i>Fri 31 Oct - Moderation Day (LC students work from home)</i>	
4	3 Nov		<i>Mon 3 Nov – Public Holiday</i>	
Exams begin (Monday 10th November) - Exams end (Thursday 20th November)				

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 Biology Level 3 will be based on the degree to which the learner can:

1. plan, work independently and collaboratively, solve problems and achieve goals
2. analyse and communicate scientific data and information
3. undertake biological inquiry to generate and evaluate data*
4. analyse the role of biological contexts
5. analyse the processes and mechanisms by which biological systems are regulated*
6. analyse homeostatic concepts, processes and interrelationships*
7. analyse concepts, processes and interrelationships as organisms respond to pathogens*
8. analyse cell division, genetics and evolution to explain biological persistence and diversity*.

*denotes criteria that are both internally and externally assessed.

Award Requirements

The final award will be determined by the Office of TASC from 13 ratings (8 from the internal assessment, 5 from external assessment). The minimum requirements for an award in this course are as follows:

EXCEPTIONAL ACHIEVEMENT (EA)

10 'A' ratings, 3 'B' ratings (3 'A' ratings, 2 'B' rating from external assessment)

HIGH ACHIEVEMENT (HA)

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

COMMENDABLE ACHIEVEMENT (CA)

6 'B' ratings, 6 'C' ratings (2 'B' ratings, 3 'C' ratings from external assessment)

SATISFACTORY ACHIEVEMENT (SA)

11 'C' ratings (3 'C' ratings from external assessment)

PRELIMINARY ACHIEVEMENT (PA)

6 'C' ratings

A learner 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.