MALANDA
STATE HIGH SCHOOL

Year 12

BIOLOGY

	Unit Title	Start/Length	Topic / Subject Matter	Assessment	Checkpoints	Due Date
Unit 3	**Biodiversity and the interconnectedness of life**	Term 1-2 ***(45 hours)***	Unit 3 includes; ***Topic 1: Biodiversity and populations***. Subject matter includes students exploring the ways biology is used to describe and explain: the biodiversity within ecosystems; a range of biotic and abiotic components; species interactions; adaptations of organisms to their environment; principles of population dynamics; and how classification systems are used to identify organisms and aid scientific communication. ***Topic 2: Functioning ecosystems and succession***. Subject matter includes, An understanding of the structure of ecosystems, the processes involved in the movement of energy and matter in ecosystems and how environmental factors limit populations is essential to appreciate the dynamics, diversity and underlying unity of these systems. Students investigate the interactions within and between species, and the interactions between abiotic and biotic components of ecosystems. They also investigate how measurements of abiotic factors, population numbers, species diversity and descriptions of interactions between species can form the basis for spatial and temporal comparisons between ecosystems..	**IA1:** Data Test **IA2:** Student Experiment	***Draft Due*** **T2 Week 1** 24/04/26	**Term 1** **Week 7** 9/3/26 **Term 2** **Week 4** 14/05/26
	Unit Title	**Start/Length**	**Topic / Subject Matter**	**Assessment**	**Checkpoints**	**Due Date**
Unit 4	**Heredity and continuity of life**	Term 2-3 ***(45 hours)***	Unit 4 inlcudes; ***Topic 1: Genetics and heredity***. Subject matter includes students investigating different factors that affect cellular processes and gene pools. They examine different patterns of inheritance and the genetic basis of the theory of evolution through natural selection to analyse the use of predictive models in decision-making.. ***Topic 2: Continuity of life on Earth***. Subject matter includes, an understanding of the processes and mechanisms of how life on Earth has persisted, changed and diversified over the last 3.5 billion years is essential to appreciate the unity and diversity of life. .	**IA3:** Research Investigation ***External Examination*** *(Units 3 & 4)*	***Draft Due*** **T3 Week 1** 16/07/26	**Term 3** **Week 3** 30/07/26 **Term 4** **See QCAA** *TBA*