

Science Matrix

	Investigation	Research	Living World	Material World	Planet Earth & Beyond		Physical World
Level 1	AS90186 1.1 Carry out a practical science investigation with direction 4 credits Internal	AS90187 1.2 Process information to describe a use of science knowledge with direction 2 credits Internal	AS90188* 1.3* Describe aspects of biology. 5 credits External	AS90189 1.4 Describe aspects of chemistry. 5 credits External	AS90190 1.5 Describe aspects of geology. 3 credits External	AS90192 1.7 Describe aspects of astronomy. 2 credits External	AS90191 1.6 Describe aspects of physics. 5 credits External
Level 2	AS90312 2.1 Carry out a practical scientific investigation with supervision 4 credits Internal	AS90771 2.2 Research information to present a scientific report 3 credits Internal	AS90772 2.3 Describe the factors and processes involved in the evolution of New Zealand's plants and animals 4 credits External	AS90766 2.8 Describe the chemical properties and effects of fertilisers 4 credits External	AS90767 2.5 Describe New Zealand's geological history 3 credits External	AS90764 2.7 Describe the nature and life cycle of stars 2 credits External	AS90768 2.9 Use physics concepts and principles to describe the behaviour of light 4 credits External
Level 3	AS90727 3.1 Carry out a practical scientific investigation with guidance 4 credits Internal	AS90728 3.2 Research a current scientific controversy 4 credits Internal	AS90729 3.3 Describe genetic processes 4 credits External	AS90730 3.4 Describe selected organic compounds and their uses 4 credits External	AS90731 3.5 Describe geological processes affecting New Zealand 2 credits External	AS90733 3.7 Report on a recent astronomical event or discovery 2 credits Internal	AS90732 3.6 Describe selected properties and applications of EMR, radioactive decay, sound and ultrasound 4 credits External

*A student cannot be credited with this standard **and either** of Biology 1.3 or Biology 1.8, because of significant overlap of assessed outcomes.