

2023 Course Credits Standards - Science

SCI 1

AS Number		Description	Credits	Literacy
90935	Internal	Carry out a practical physics investigation with direction	4	No
90930	Internal	Carry out a practical physics investigation with direction	4	No
90940	External	Demonstrate an understanding of aspects of mechanics	4	No
90944	External	Demonstrate an understanding of aspects of acids and bases	4	No
90948	External	Demonstrate an understanding of aspects of genetic variation	4	Yes
Total Credits Available (from 2 Internals and 3 Externals)			20	

SCA 1

AS Number		Description	Credits	Literacy
90935	Internal	Carry out a practical physics investigation with direction	4	No
90930	Internal	Carry out a practical physics investigation with direction	4	No
90955	Internal	Investigate an astronomical or earth science event	4	Yes
90946	Internal	Investigate the implications of the properties of metals for their use in society	4	No
Total Credits Available (from 4 Internals)			16	

ESS2

AS Number		Description	Credits	Literacy
91187	Internal	Carry out a practical Earth & Space science investigation	4	Yes
91188	Internal	Examine and Earth & Space science issue and the validity of the information communicated to the public	4	Yes
91189	Internal	Investigate geological processes in an NZ locality	4	Yes
91190	Internal	Investigate how organisms survive in an extreme environment	4	Yes
91191	External	Demonstrate an understanding of the causes of extreme Earth events in NZ	4	No
Total Credits Available (from 4 Internals and 1 External)			20	

ESS3

AS Number		Description	Credits	Literacy
91410	Internal	Carry out an independent practical Earth & Space science investigation	4	Yes
91411	Internal	Investigate a socio-scientific issues in an Earth & space science context	4	Yes
91412	Internal	Investigate the evidence related to dating geological events	4	Yes
91415	Internal	Investigate an aspect of astronomy	4	Yes
91413	External	Demonstrate understanding of processes in the ocean system	4	Yes
Total Credits Available (from 4 Internals and 1 External)			20	

BIO2

AS Number		Description	Credits	Literacy
91153	Internal	Carry out a practical investigation in a biology context, with supervision	4	No
91158	Internal	Investigate a pattern in an ecological community, with supervision	4	Yes
91155	Internal	Demonstrate understanding of adaptations of plants or animals to their way of life	3	Yes
91156	External	Demonstrate understanding of life processes at the cellular level	4	Yes
91157	External	Demonstrate understanding of genetic variation and change	4	Yes
91159	External	Demonstrate understanding of gene expression	4	Yes
Total Credits Available (from 3 Internals and 3 Externals)			23	

BIO3

AS Number		Description	Credits	Literacy
91602	Internal	Integrate biological knowledge to develop an informed response to a socio-scientific issue	3	Yes
91604	Internal	Demonstrate understanding of how an animal maintains a stable internal environment	3	Yes
91603	External	Demonstrate understanding of the response of plants and animal to their external environment	5	Yes
91605	External	Demonstrate understanding of evolutionary processes leading to speciation	4	Yes
91606	External	Demonstrate understanding of trends in human evolution	4	Yes
Total Credits Available (from 2 Internals and 3 Externals)			19	

CHE2

AS Number		Description	Credits	Literacy
91163	Internal	Demonstrate understanding of the chemistry used in the development of current technology	3	Yes
91167	Internal	Demonstrate understanding of oxidation-reduction	3	No
91164	External	Demonstrate understanding of bonding, structure, properties and energy changes	5	Yes
91165	External	Demonstrate understanding of the properties of selected organic compounds	4	Yes
91166	External	Demonstrate understanding of chemical reactivity	4	Yes
Total Credits Available (from 2 Internals and 3 Externals)			19	

CHE3

AS Number		Description	Credits	Literacy
91388	Internal	Demonstrate understanding of spectroscopic data in chemistry	3	No
91389	Internal	Demonstrate understanding of chemical processes in the world around us	3	Yes
91393	Internal	Demonstrate understanding of oxidation-reduction processes	3	Yes
91390	External	Demonstrate understanding of thermochemical principles and the properties of particles and substances	5	Yes
91391	External	Demonstrate understanding of the properties of organic compounds	5	Yes
Total Credits Available (from 3 Internals and 2 Externals)			19	

PHY2

AS Number		Description	Credits	Literacy
91172	Internal	Demonstrate understanding of atomic and nuclear physics	3	Yes
91168	Internal	Carry out a practical physics investigation that leads to a non-linear mathematical relationship	4	Yes
91170	External	Demonstrate understanding of waves	4	Yes
91171	External	Demonstrate understanding of mechanics	6	Yes
91173	External	Demonstrate understanding of electricity and electromagnetism	6	Yes
Total Credits Available (from 2 Internals and 3 Externals)			23	

PHY3

AS Number		Description	Credits	Literacy
91521	Internal	Carry out a practical investigation to test a physics theory relating two variables in a non-linear relationship	4	Yes
91525	Internal	Demonstrate understanding of Modern Physics	3	Yes
91523	External	Demonstrate understanding of wave systems	4	Yes
91524	External	Demonstrate understanding of mechanical systems	6	Yes
91526	External	Demonstrate understanding of electrical systems	6	Yes
Total Credits Available (from 2 Internals and 3 Externals)			23	