AOTEA COLLEGE

NCEA Course Outline 2024

Course title:	**Environmental and Life Sciences 300**
NCEA level(s):	**Level 3**
Course Code:	**ELS300**

Goals

The goals of this course are:

- An understanding of how Science and Science based applications impact on society and are influenced by the needs and attitudes of people
- Research skills
- The ability to problem solve, apply ideas to new situations and to communicate sensibly about science
- Confidence and skills with the tools of science (i.e. equipment, procedures and scientific language)
- Students that are effective, enthusiastic and independent learners who are able to work independently, cooperatively and collaboratory

Assessment

The assessments are achievement standards, this course offers University Entrance and can be a subject domain of Science

Course Endorsement

Course endorsement with **Achieved, Merit** or **Excellence** is possible, but only for those akonga that wish to do an external examination.
Please note that this will need to be indicated in Term 1 during the year planning in class, and students will be expected to study independently for the external.
Some time may be given in class for this for study.

Assessment summary

NZQF Standard Code	Level	Standard Title	**Credits**	Is this a UELiteracy reading standard? **(Yes or No)**	Is this a UELiteracy writing standard? **(Yes or No)**	Is this a Numeracy standard? **(Yes or No)**	Assessment type **(External or Internal)**	Is reassessment available? (Yes or No)
AS91411 Version 2	3 ESS	**Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	4	Y	N	N	Internal	No
AS91410 Version 2	3 ESS	**Carry out an independent practical Earth and Space Science investigation: 3.1**	4	Y	N	N	Internal	No
AS91388 Version 2	3 CHEM	Demonstrate understanding of spectroscopic data in chemistry: 3.2	3	N	N	N	Internal	No
AS91389 Version 2	3 CHEM	**Demonstrate understanding of chemical processes in the world around us: 3.3**	3	Y	Y	N	Internal	No
AS91412 Version 2	3 ESS	**Investigate the evidence related to dating geological event(s): 3.3**	4	N	N	N	Internal	No

Topic outline (in teaching order)

Topic	NZQF Standard Code	Content	Teaching Time
Ocean Acidification	AS91411 Version 2	**Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	7 weeks
Investigation: Healthy Streams	AS91410 Version 2	**Carry out an independent practical Earth and Space Science investigation: 3.1**	7 weeks
Poisoned?	AS91388 Version 2	Demonstrate understanding of spectroscopic data in chemistry: 3.2	6 weeks
Ocean Acidifcation	AS91389 Version 2	**Demonstrate understanding of chemical processes in the world around us: 3.3**	6 weeks
Ruapehu Eruption	AS91412 Version 2	**Investigate the evidence related to dating geological event(s): 3.3**	6 weeks

Internal Assessment Timeline 2024

	Term 1 02 Feb - 12 Apr	Term 2 29 Apr - 05 Jul	Term 3 22 Jul - 27 Sep	Term 4 14 Oct - 8 Dec
Week 1	Mon 29 Jan ***Course Confirmation Week*** ***Year 9 Powhiri 01/02***	Mon 29 Apr **Carry out an independent practical Earth and Space Science investigation: 3.1**	Mon 22 Jul **Demonstrate understanding of chemical processes in the world around us: 3.3**	Mon 14 Oct **Investigate the evidence related to dating geological event(s): 3.3**
Week 2	Mon 05 Feb ***Waitangi observed 06/02*** **Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	Mon 06 May **Carry out an independent practical Earth and Space Science investigation: 3.1**	Mon 29 Jul **Demonstrate understanding of chemical processes in the world around us: 3.3**	Mon 21 Oct ***Regional Teacher Only Day 25/10*** **Investigate the evidence related to dating geological event(s): 3.3**
Week 3	Mon 12 Feb **Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	Mon 13 May **Carry out an independent practical Earth and Space Science investigation: 3.1**	Mon 05 Aug **Demonstrate understanding of chemical processes in the world around us: 3.3**	Mon 28 Oct ***Labour Day Mon 28 Oct*** ***Seniors Last Day Wed 30/10***
Week 4	Mon 19 Feb **Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	Mon 20 May **Carry out an independent practical Earth and Space Science investigation: 3.1**	Mon 12 Aug **Demonstrate understanding of chemical processes in the world around us: 3.3**	Mon 04 Nov ***NCEA Exams Start Tue 05 Nov***
Week 5	Mon 26 Feb ***Goal Setting day 01/03*** **Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	Mon 27 May ***Fri 31/05 Regional Teacher Only Day*** Demonstrate understanding of spectroscopic data in chemistry: 3.2	Mon 19 Aug **Demonstrate understanding of chemical processes in the world around us: 3.3**	Mon 11 Nov
Week 6	Mon 04 Mar **Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	Mon 03 Jun **Mon 03/06 King's Birthday** Demonstrate understanding of spectroscopic data in chemistry: 3.2	Mon 26 Aug ***Course Selection Day*** **Demonstrate understanding of chemical processes in the world around us: 3.3**	Mon 18 Nov
Week 7	Mon 11 Mar **Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	Mon 10 Jun Demonstrate understanding of spectroscopic data in chemistry: 3.2	Mon 02 Sep ***Winter Tournament Week*** **Investigate the evidence related to dating geological event(s): 3.3**	Mon 25 Nov ***NCEA Exams Finish 29 Nov***

Week 8	Mon 18 Mar ***Summer Tournament Week*** **Investigate a socio-scientific issue in an Earth and Space Science context: 3.2**	Mon 17 Jun **Fri 28/06 Matariki** Demonstrate understanding of spectroscopic data in chemistry: 3.2	Mon 09 Sep **Derived Grade Exams** **Investigate the evidence related to dating geological event(s): 3.3**	Mon 02 Dec
Week 9	Mon 25 Mar ***Good Fri 29/03*** **Carry out an independent practical Earth and Space Science investigation: 3.1**	Mon 24 Jun Demonstrate understanding of spectroscopic data in chemistry: 3.2	Mon 16 Sep **Investigate the evidence related to dating geological event(s): 3.3**	Mon 09 Dec ***Last day for Juniors 07/12***
Week 10	Mon 01 Apr ***Easter Monday 01/04*** ***Easter Tuesday 02/04*** **Carry out an independent practical Earth and Space Science investigation: 3.1**	Mon 01/07 Demonstrate understanding of spectroscopic data in chemistry: 3.2	Mon 23 Sep **Investigate the evidence related to dating geological event(s): 3.3**	
Week 11	Mon 08 Apr **Carry out an independent practical Earth and Space Science investigation: 3.1**			

Links to standards

https://www.nzqa.govt.nz/nqfdocs/ncea-resource/achievements/2019/as91411.pdf **ESS Issue**

https://www.nzqa.govt.nz/nqfdocs/ncea-resource/achievements/2019/as91410.pdf **ESS Practical**

https://www.nzqa.govt.nz/nqfdocs/ncea-resource/achievements/2019/as91388.pdf **Chem Spectroscopy**

https://www.nzqa.govt.nz/nqfdocs/ncea-resource/achievements/2019/as91389.pdf **Chem Issue**

https://www.nzqa.govt.nz/nqfdocs/ncea-resource/achievements/2019/as91412.pdf **Geology Issue**