



Course Outline (Higher Education)

School:	School of Health and Life Sciences
Course Title:	ENVIRONMENTAL CHANGE
Course ID:	SCENV3501
Credit Points:	15.00
Prerequisite(s):	Nil
Co-requisite(s):	Nil
Exclusion(s):	(SE735)
ASCED:	019999

Description of the Course :

In order to manage the environment, we must first understand the concepts of natural variability and change through time. In this course we look at how aquatic and terrestrial environments have responded to change through deep time and how human impact has accelerated change or altered the natural conditions. We investigate ideas of resilience and of state shift and how this effects future management options

Grade Scheme: Graded (HD, D, C, etc.)

Work Experience:

No work experience: Student is not undertaking work experience in industry.

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks..

Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Learning Outcomes:
Knowledge:

- K1.** Describe geological time frames, change and variability, and dating techniques
- K2.** Identify the main drivers of global climate change and the responses of natural systems to climate drivers
- K3.** Explore the research methods that reveal long term environmental change
- K4.** Investigate the relative impact of people on environmental change in southeastern Australia

Skills:

- S1.** Source, read and interpret complex primary environmental change literature
- S2.** Communicate complex scientific ideas in a clear and convincing manner
- S3.** Prepare, describe and analyse sediments and subfossils

Application of knowledge and skills:

- A1.** Analyse written material, synthesize evidence and write logical essays
- A2.** Integrate field and laboratory material into a technical report

Course Content:

This course takes a journey through deep time to investigate how aquatic and terrestrial environments have responded to natural variability and the impact of anthropogenic influence. We have a field trip to western Victoria, focusing on the long records of both climate variability and human history preserved there.

Topics may include:

- Nature of change
- Dating techniques
- Extinction and ecological change
- Climate change
- Indigenous history
- Recent human impacts
- Current research

Values:

- V1.** Recognise scientists capacity to reconstruct change over long time frames
- V2.** Appreciate natural climate change thereby placing future change in context
- V3.** Recognise the capacity of people to change the nature of the earth and the environment
- V4.** Appreciate the concept of deep time

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K2, S1, S2	Environmental change research	Tutorial Presentation	10-20%
K1, K2, S1, S2, A1	Environmental change research essay	Essay	20-30%
K2, K3, K4, S2, S3, A2	Field presentation, laboratory analysis and practical report	Field & Practical Report	30-40%
K1, K2, K3, K4, S2	Theory exam	Exam	30-40%

Adopted Reference Style:

Other (Austral Ecology)