

# Unit Outline (Higher Education)

**Institute / School:** Institute of Innovation, Science & Sustainability

**Unit Title:** SUSTAINABLE EARTH

**Unit ID:** SCSUS1500

**Credit Points:** 15.00

**Prerequisite(s):** Nil

**Co-requisite(s):** Nil

**Exclusion(s):** SCENV1500

**ASCED:** 050999

**Description of the Unit:**

This unit looks at the impact humans have had on the Earth. We address, in turn, the main components of the habitable parts of the planet and examine the fundamental, natural processes within each. With this grounding we then superimpose the impact of people, particularly the excesses of post-industrial humanity, upon the Earth to reveal the consequences of the activities of modern society. The unit emphasizes that environmental sustainability requires an understanding, not only of the processes that can be identified today, but of the rate, sequence and nature of changes which have taken place in our recent past. Further, that environmental sustainability demands consideration, not only of environmental processes, but also the social and political constraints to change. The unit provides an opportunity to take stock of where we currently are and how we can plan for a more sustainable, equitable and regenerative future.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

**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 Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment

**Course Level:**

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>					
Advanced	<input type="checkbox"/>					

### Learning Outcomes:

Students undertaking this course are expected to be able to demonstrate the following knowledge and skills.

#### Knowledge:

- K1.** Recognise Australian and global environmental management processes and issues
- K2.** Describe and evaluate the process of ecologically sustainable development and implications for natural resource management
- K3.** Investigate the processes that have led to recent climate and environmental change
- K4.** Explore positive steps that can be made at local, regional and global levels toward a sustainable future

#### Skills:

- S1.** Ability to source and critically assess popular and peer-reviewed scientific literature
- S2.** Identify and evaluate human impact on the landscape

#### Application of knowledge and skills:

- A1.** Evaluate competing scientific arguments, including questioning prior assumptions
- A2.** Communicate complex environmental issues to a lay audience in both oral and written forms
- A3.** Scrutinise choices made in daily life that can contribute to a sustainable future

#### Unit Content:

This unit investigate's the impact that humans have had on the Earth over time and questions whether this is sustainable into the future. We cover various aspects of natural resource management including soil, water and biota, as well as economic and political drivers and barriers.

Topics may include:

- Environmental problems
- Natural capital
- Climate change
- Hazards and pollution
- Environmental economics
- Environmental law

#### FEDTASKS

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**tttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are be embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Co-operative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly assessed in each Course.*

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 1 Interpersonal	<p>Students will demonstrate the ability to effectively communicate, interact and work with others both individually and in groups. Students will be required to display skills in-person and/or online in:</p> <ul style="list-style-type: none"> <li>• Using effective verbal and non-verbal communication</li> <li>• Listening for meaning and influencing via active listening</li> <li>• Showing empathy for others</li> <li>• Negotiating and demonstrating conflict resolution skills</li> <li>• Working respectfully in cross-cultural and diverse teams.</li> </ul>	K2, A2	AT2
FEDTASK 2 Leadership	<p>Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in:</p> <ul style="list-style-type: none"> <li>• Creating a collegial environment</li> <li>• Showing self-awareness and the ability to self-reflect</li> <li>• Inspiring and convincing others</li> <li>• Making informed decisions</li> <li>• Displaying initiative</li> </ul>	Not applicable	Not applicable
FEDTASK 3 Critical Thinking and Creativity	<p>Students will demonstrate an ability to work in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in:</p> <ul style="list-style-type: none"> <li>• Reflecting critically</li> <li>• Evaluating ideas, concepts and information</li> <li>• Considering alternative perspectives to refine ideas</li> <li>• Challenging conventional thinking to clarify concepts</li> <li>• Forming creative solutions in problem solving</li> </ul>	K4, S1, A1, A3	AT2, AT4
FEDTASK 4 Digital Literacy	<p>Students will demonstrate the ability to work fluently across a range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in:</p> <ul style="list-style-type: none"> <li>• Finding, evaluating, managing, curating, organising and sharing digital information</li> <li>• Collating, managing, accessing and using digital data securely</li> <li>• Receiving and responding to messages in a range of digital media</li> <li>• Contributing actively to digital teams and working groups</li> <li>• Participating in and benefiting from digital learning opportunities</li> </ul>	Not applicable	Not applicable
FEDTASK 5 Sustainable and Ethical Mindset	<p>Students will demonstrate the ability to consider and assess the consequences and impact of ideas and actions in enacting ethical and sustainable decisions. Students will be required to display skills in:</p> <ul style="list-style-type: none"> <li>• Making informed judgments that consider the impact of devising solutions in global economic environmental and societal contexts</li> <li>• Committing to social responsibility as a professional and a citizen</li> <li>• Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses</li> <li>• Embracing lifelong, life-wide and life-deep learning to be open to diverse others</li> <li>• Implementing required actions to foster sustainability in their professional and personal life.</li> </ul>	K2, K3, K4, S2, A3	AT2, AT3, AT4

### Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K3, S2	Practical exercises worked through in class	Practical reports	10-30%
K1, K2, K3, K4, S1, S2, A1, A2, A3	Group presentation to tutorial class	Oral presentation	20-40%
K1, S1, S2, A3	Written report	Research report	20-40%
K1, K2, K3, K4	Short and extended answer	Test	10-30%

### Alignment to the Minimum Co-Operative Standards (MiCS)

The Minimum Co-Operative Standards (MiCS) are an integral part of the Co-Operative University Model. Seven criteria inform the MiCS alignment at a Course level. Although Units must undertake MiCS mapping, there is NO expectation that Units will meet all seven criteria. The criteria are as follows:

1. Co-design with industry and students
2. Co-develop with industry and students
3. Co-deliver with industry
4. FedTASK alignment
5. Workplace learning and career preparation
6. Authentic assessment
7. Industry-link/Industry facing experience

MiCS Course level reporting highlights how each Course embraces the principles and practices associated with the Co-Operative Model. Evidence of Course alignment with the MiCS, can be captured in the Course Modification Form.

**MICS Mapping has been undertaken for this Unit** No

Date:

### Adopted Reference Style:

Australian Harvard

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)