

# Unit Outline (Higher Education)

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

Unit Title: ECOSYSTEMS CONSERVATION AND MANAGEMENT

Unit ID: SCENV3800

Credit Points: 15.00

**Prerequisite(s):** (SCENV2200 or SCENV2500)

Co-requisite(s): Nil

Exclusion(s): Nil

**ASCED:** 019999

# **Description of the Unit:**

The rapid and ongoing modification and degradation of habitat and natural ecosystems is a global issue. In order to appropriately conserve and manage ecosystems to ensure their resilience to withstand further change we must understand their underlying patterns, processes and dynamics. The question of how and where to allocate conservation resources is complex and challenging. This unit explores in detail some of the current thinking and theoretical frameworks that underpin ecosystem conservation and management, including island biogeography, the SLOSS concept, landscape ecology, indigenous land management and ecosystem resilience.

**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					
Level of Official Course	5	6	7	8	9	10
Introductory						
Intermediate						
Advanced			V			

## **Learning Outcomes:**

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

## **Knowledge:**

- **K1.** Evaluate the nature of ecosystems and the associated ecological theories that underpin their conservation and management.
- **K2.** Appraise key global issues that affect ecosystem conservation and management.
- **K3.** Express reasoned opinions regarding contemporary approaches to ecosystem conservation and management.

#### **Skills:**

- **S1.** Examine, critically evaluate and synthesise published and other information that considers ecosystem conservation and management.
- **S2.** Determine appropriate actions and approaches to address ecosystem conservation and management.
- **S3.** Develop skills in critically assessing conservation plans.

## Application of knowledge and skills:

- **A1.** Apply ecological theory to conservation and management planning scenarios.
- **A2.** Evaluate various issues which can affect ecosystem conservation and management and apply knowledge to recommend conservation and management strategies.
- **A3.** Use knowledge of ecosystem function and conservation management to evaluate or develop conservation plans

#### **Unit Content:**

The content in this unit explores in detail approaches to ecosystem conservation and management that promotes ecological resilience. The current thinking, theories and paradigms underpinning ecosystem conservation and management are considered, including landscape ecology, island biogeography, indigenous land management and ecosystem-scale conservation approaches.

## Topics may include:

- Island biogeography applications.
- Landscape ecology.
- Ecosystem resilience.
- Comprehensive, adequate and representative conservation management.
- Indigenous land management.
- Ecosystem-scale conservation in action.

#### **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**ttributes **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 Cooperative 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.

			Development and acquisition of FEDTASKS in the Unit		
FEDTASK attribute and descriptor		Learning Outcomes (KSA)	Assessment task (AT#)		
FEDTASK 1 Interpersonal	Students will demonstrate the ability to effectively communicate, inter-act and work with others both individually and in groups. Students will be required to display skills in-person and/or online in:  Using effective verbal and non-verbal communication  Listening for meaning and influencing via active listening  Showing empathy for others  Negotiating and demonstrating conflict resolution skills  Working respectfully in cross-cultural and diverse teams.	K2, K3, A2	AT1, AT2, AT3		
FEDTASK 2 Leadership	Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in:  Creating a collegial environment  Showing self -awareness and the ability to self-reflect  Inspiring and convincing others  Making informed decisions  Displaying initiative	S2, A1, A2, A3	AT1, AT2, AT3		
FEDTASK 3 Critical Thinking and Creativity	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:  Reflecting critically  Evaluating ideas, concepts and information  Considering alternative perspectives to refine ideas  Challenging conventional thinking to clarify concepts  Forming creative solutions in problem solving.	K1, K2, K3, S1, S2, S3, A1, A2, A3	AT1, AT2, AT3		



FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit		
		Learning Outcomes (KSA)	Assessment task (AT#)	
	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:	Not applicable	Not applicable	
FEDTASK 4 Digital Literacy	Finding, evaluating, managing, curating, organising and sharing digital information			
	Collating, managing, accessing and using digital data securely			
	Receiving and responding to messages in a range of digital media			
	Contributing actively to digital teams and working groups			
	Participating in and benefiting from digital learning opportunities.			
FEDTASK 5 Sustainable and Ethical Mindset	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:	K1, K2, K3, S1, S2, S3, A1, A2, A3	AT1, AT2, AT3	
	Making informed judgments that consider the impact of devising solutions in global economic environmental and societal contexts			
	Committing to social responsibility as a professional and a citizen			
	Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses			
	Embracing lifelong, life-wide and life-deep learning to be open to diverse others			
	Implementing required actions to foster sustainability in their professional and personal life.			

# **Learning Task and Assessment:**

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K3, S1, S2, A1, A2	Tutorial discussions based on theoretical and practical aspects of ecosystem conservation and management described in the published literature or other media.	Tutorial discussions and associated freewrites and reflections	20-40%
K1, K2, K3, S1, S2, S3, A1, A2, A3	Critically review an existing conservation management plan including justified recommendations for change	Major assignment	20-40%
K1, K2, S1, S2, A1, A2	Demonstration, application and interpretation of knowledge and skills.	End of semester test	30-40%

# **Adopted Reference Style:**





APA

Refer to the <u>library website</u> for more information

Fed Cite - referencing tool