



Course Outline (Higher Education)

School:	School of Science, Psychology and Sport
Course Title:	ARID ZONE: ECOLOGY, MANAGEMENT AND CHALLENGES
Course ID:	SCENV3204
Credit Points:	15.00
Prerequisite(s):	SCENV2101
Co-requisite(s):	Nil
Exclusion(s):	SCENV3203
ASCED:	019999

Description of the Course:

The content of this course explores the ecology, management and challenges of arid landscapes, both within Australia and internationally. It compares the arid zone of Australia with similar zones in other parts of the world and contrasts the impact of different land uses on the development of rangelands. It considers the threats to rangelands such as overgrazing by indigenous and domesticated animals, soil erosion, rabbits, weeds and feral animals. It evaluates the role of conservation reserves, as well as how to conduct a useful biological survey in a remote arid area.

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 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"/>

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Intermediate	■	■	■	■	■	■
Advanced	■	■	✓	■	■	■

Learning Outcomes:

Knowledge:

- K1.** Compare and contrast the nature and extent of the arid zone of Australia and other parts of the world
- K2.** Describe the role that climatic conditions play in distribution of natural ecosystems within an arid zone
- K3.** Identify various conflicts and land issues and explain what they are, and why they must be taken into account when managing an arid zone flora and fauna

Skills:

- S1.** Evaluate and distinguish between the patterns of distribution of the major rangeland vegetation types and associated fauna
- S2.** Develop and conduct biological survey techniques in an arid zone flora and fauna
- S3.** Demonstrate the capacity to work effectively both individually and in teams
- S4.** Analyse, summarise and present both the flora and fauna data gathered in the field and the major scientific findings to a relevant audience

Application of knowledge and skills:

- A1.** Critically evaluate data gathered from the field
- A2.** Prepare a scientific paper in an accepted format using appropriate scientific language
- A3.** Apply teamwork skills to the completion of field activities

Course Content:

Scope:

The content of this course explores the ecology of arid zones, both within Australia and internationally. It compares the arid zone of Australia with similar zones in other parts of the world and contrasts the impact of different land uses on the development of rangelands. It considers the threats to rangelands such as overgrazing by indigenous and domesticated animals, soil erosion, rabbits, weeds and feral animals. It evaluates the role of conservation reserves, as well as how to conduct a useful biological survey in a remote arid area.

Topics may include:

- Topics may include:
 - Comparison of the arid zone flora and fauna of Australia with those in other parts of the world
 - The impact of different land uses on the development of rangelands in the arid zone of Australia and other parts of the world
 - Threats to rangelands such as overgrazing by indigenous and domesticated animals, soil erosion, rabbits, weeds, feral animals

Conservation reserves
Biological survey in remote areas

Values:

- V1. Evaluate and assess the current threats to the Australian arid zone
- V2. Recognise and evaluate the conflicts over land use in arid zones in Australia

Graduate Attributes

The Federation University FedUni graduate attributes (GA) are entrenched in the [Higher Education Graduate Attributes Policy](#) (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K1, S2, A1	AT1, AT2, AT3
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	K2,A1	AT1, AT3
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	K1, K2, S3, A3	AT1, AT2, AT3
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	S3, A2	AT2, AT3,
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	S4, A2	AT2

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1-K3, S1, S3, S4,A1, A2	Seminar presentation on a rangeland issue	An oral presentation	10-20%
K2, S2,S3,S4,A1,A2,A3	Aridzone field based research project (Flora or Fauna)	Written report	30-50%
K2, S2,S3,S4,A1,A2,A3	Aridzone vegetation survey report	Written report	30-50%

Adopted Reference Style:

Australian Harvard

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

Fed Cite - [referencing tool](#)