



# Course Outline (Higher Education)

<b>School:</b>	School of Science, Psychology and Sport
<b>Course Title:</b>	ARID ZONE ECOLOGY
<b>Course ID:</b>	SCENV3203
<b>Credit Points:</b>	15.00
<b>Prerequisite(s):</b>	Nil
<b>Co-requisite(s):</b>	Nil
<b>Exclusion(s):</b>	Nil
<b>ASCED:</b>	050901

**Description of the Course :**

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.

**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.** 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

**Skills:**

- S1.** Evaluate and distinguish between the patterns of distribution of the major rangeland vegetation types
- S2.** Develop and conduct biological survey techniques in an arid zone ecosystem
- S3.** Demonstrate the capacity to work effectively both individually and in teams
- S4.** Analyse, summarise and present both the 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:**

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:

- Comparison of the arid zone 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)	Code A. Direct B. Indirect N/A Not addressed	Assessment task (AT#)	Code A. Certain B. Likely C. Possible N/A Not likely
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	B, B, B	A1, A2, A3	C, C, C
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	B, B	A1, A4	C, C
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	A, A, A	A2, A3, A4	A, A, A
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.	S1, S3, A2	A, A, A	A2, A3, A4	A, A, A
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.	K3, A2	A	A3	C

**Learning Task and Assessment:**

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1-K3, S1, S3, S4,A1, A2	Seminar paper on a rangeland issue	Written Report	10-30%
K1-K3, S1, S3, S4,A1, A2	Seminar paper on a rangeland issue	Oral presentation	10-20%
K2, S2,S3,S4,A1,A2,A3	Vegetation survey in the arid zone	Vegetation survey in the arid zone	20-40%
K2,S2,S3,S4,A1,A2,A3	Research project	Written Report	20-40%
K2,S2,S3,S4,A1,A2,A3	Research project	Oral presentation	10-20%

**Adopted Reference Style:**

Other (Austral Ecology)