



COURSE OUTLINE

ENS222

Terrestrial Vertebrate Diversity and Ecology

Course Coordinator: Dominique Potvin (dpotvin@usc.edu.au) **School:** School of Science, Technology and Engineering

2021 | Semester 2

USC Sunshine Coast

USC Moreton Bay

USC Fraser Coast

ON CAMPUS

Most of your course is on campus but you may be able to do some components of this course online.

Please go to the USC website for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

This course introduces you to the diversity, ecology and evolution of the terrestrial vertebrates through the disciplines of herpetology, ornithology and mammalogy. You will develop an appreciation of the scope and relevance of these disciplines via lectures and laboratory classes. You will participate in a local field project where you will apply theoretical knowledge and develop practical skills in ethical wildlife research.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
ON CAMPUS			
Tutorial/Workshop 1 – Weeks 10 - 12	2hrs	Week 10	3 times
Laboratory 1 – Weeks 2- 5	2hrs	Week 2	4 times
Fieldwork	8hrs	Week 8	Once Only
Lecture – Weeks 1 -8 and 13	2hrs	Week 1	9 times

1.3. Course Topics

Herpetology
Ornithology
Mammalogy

Counting wildlife: Mark-
Recapture and Distance
sampling
Terrestrial habitats

Evolution and biogeography
Vertebrate population ecology
Vertebrate community ecology

2. What level is this course?

200 Level (Developing)

Building on and expanding the scope of introductory knowledge and skills, developing breadth or depth and applying knowledge and skills in a new context. May require pre-requisites where discipline specific introductory knowledge or skills is necessary. Normally, undertaken in the second or third full-time year of an undergraduate programs.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...
1 Apply and demonstrate knowledge of diversity, ecology and evolution of wildlife in various contexts. Building disciplinary and interdisciplinary knowledge through a scholarly approach incorporating global and regional perspectives (Professional Standards mapping)	Knowledgeable
2 Conduct scientific research using field and ecology data analysis skills - having both the capacity and confidence to pursue the attainment of full potential (Professional Standards mapping)	Empowered
3 Communicate in the style of a formal scientific poster - having both the capacity and confidence to pursue the attainment of full potential (Professional Standards mapping)	Engaged
4 Identify and apply ethical principles to wildlife research - acting with integrity in intellectual, professional and community pursuits (Professional Standards mapping)	Ethical

5. Am I eligible to enrol in this course?

Refer to the [USC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

SCI102

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

In week 4 your responses to an online quiz will be viewed to ascertain your grasp of key concepts delivered during the first three weeks of this course.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Quiz/zes	Individual	0%	20 questions	Week 3	Online Test (Quiz)
All	2	Examination	Individual	35%	1hr	Refer to Format	In Class
All	3	Artefact - Creative	Group	30%	A3 scientific poster	Refer to Format	Online Assignment Submission with plagiarism check
All	4	Examination - Centrally Scheduled	Individual	35%	2hr	Exam Period	Exam Venue

All - Assessment Task 1: Online quiz

GOAL:	Demonstrate basic comprehension of the lecture and practical class material, and the course structure, covered up to and including week 3.	
PRODUCT:	Quiz/zes	
FORMAT:	Multiple choice questions	
CRITERIA:	No.	Learning Outcome assessed
	1	Demonstrated ability to correctly answer questions drawn from the course outline and lecture and practical classes up to and including week 3. 1

All - Assessment Task 2: Practical exam

GOAL:	Demonstrate an understanding of the relationships between animal form and ecology and to correctly identify animal groups.	
PRODUCT:	Examination	
FORMAT:	Submit: Week 5 Sippy Downs, Week 13 Fraser Coast. Individual; short answer exam	
CRITERIA:	No.	Learning Outcome assessed
	1	Demonstrated ability to correctly identify the lifestyle of various animal specimens based on morphology of limbs, sensory organs, 1
	2	(cont) teeth and other traits covered during practical and lecture classes, and ability to correctly identify animal specimens using supplied resources.

All - Assessment Task 3: Scientific poster - field project

GOAL:	Produce a scientific poster outlining the methods, results and implications of field work.												
PRODUCT:	Artefact - Creative												
FORMAT:	Submit: Week 13 Sippy Downs, Week 8 Fraser Coast. Group assessment; scientific poster which outlines the methods, results and implications of data gained during the class field trip. Layout follows the conventional scientific convention; Introduction, Methods, Results and Discussion; Appropriate use of images and text; appropriate analysis of ecological data collected during field surveys.												
CRITERIA:	<table border="1"><thead><tr><th>No.</th><th></th><th>Learning Outcome assessed</th></tr></thead><tbody><tr><td>1</td><td>Knowledge of wildlife diversity</td><td>1</td></tr><tr><td>2</td><td>Field and ecology data collection and analysis skills</td><td>2 4</td></tr><tr><td>3</td><td>Meeting discipline specifications for a scientific poster</td><td>3</td></tr></tbody></table>	No.		Learning Outcome assessed	1	Knowledge of wildlife diversity	1	2	Field and ecology data collection and analysis skills	2 4	3	Meeting discipline specifications for a scientific poster	3
No.		Learning Outcome assessed											
1	Knowledge of wildlife diversity	1											
2	Field and ecology data collection and analysis skills	2 4											
3	Meeting discipline specifications for a scientific poster	3											

All - Assessment Task 4: Final exam

GOAL:	Demonstrate knowledge of evolution, adaptations and field study of vertebrates						
PRODUCT:	Examination - Centrally Scheduled						
FORMAT:	Written exam including multiple choice and short answer questions						
CRITERIA:	<table border="1"><thead><tr><th>No.</th><th></th><th>Learning Outcome assessed</th></tr></thead><tbody><tr><td>1</td><td>Correctly answer multiple choice questions; provide comprehensive written responses to short answer questions</td><td>1</td></tr></tbody></table>	No.		Learning Outcome assessed	1	Correctly answer multiple choice questions; provide comprehensive written responses to short answer questions	1
No.		Learning Outcome assessed					
1	Correctly answer multiple choice questions; provide comprehensive written responses to short answer questions	1					

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Directed study hours may vary by location. Student workload is calculated at 12.5 learning hours per one unit.

7.1. Schedule

PERIOD AND TOPIC	ACTIVITIES
Week 1 - Herpetology (SD/MB); Sampling Wildlife (FC)	Lecture & Lab (SD/MB); Lecture & Workshop (FC)
Week 2 - Ornithology (SD/MB); Terrestrial Habitats (FC)	Lecture & Lab (SD/MB); Lecture & Workshop (FC)
Week 3 - Mammalogy (SD/MB); Field skills (FC)	Lecture & Lab (SD/MB); Workshop (FC)
Week 4 - Practical exam (SD/MB); Field Class (FC)	Practical Exam (SD/MB); Field Class (FC)
Week 5 - Counting wildlife (SD/MB); Evolution and Biogeography (FC)	Lecture & Workshop (SD/MB/FC)
Week 6 - Terrestrial Habitats (SD/MB); Population Ecology (FC)	Lecture & Workshop (SD/MB); Lecture (FC)
Week 7 - Field Skills (SD/MB); Community Ecology (FC)	Workshop (SD/MB); Lecture (FC)
Week 8 - Field Class (SD/MB); Herpetology (FC)	Field Class (SD/MB); Lecture & Lab (FC)
Week 9 - Evolution and Biogeography (SD/MB); Ornithology (FC)	Lecture & Workshop (SD/MB); Lecture & Lab (FC)
Week 10 - Population Ecology (SD/MB); Mammalogy (FC)	Lecture (SD/MB); Lecture & Lab (FC)
Week 11 - Community Ecology (SD/MB); Practical exam (FC)	Lecture (SD/MB); Practical Exam (FC)
Week 12 - Conservation (SD/MB/FC)	Lecture (SD/MB/FC)
Week 13 - Revision (SD/MB/FC)	Tutorial (SD/MB/FC)

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Blackboard site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

There are no required/recommended resources for this course.

8.2. Specific requirements

Students will be required to participate in a full day of field work on one day during Week 8 (SD/MB) or Week 3 or 4 (FC)

9. How are risks managed in this course?

Risk assessments have been performed for all field activities and a low level of health and safety risk exists. Some risks concerns may include working in an unknown environment as well as slip and trip hazards. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

The final mark is in the percentage range 47% to 49.4%

The course is graded using the Standard Grading scale

You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.

- 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.

- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.5. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.6. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, , injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.7. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website: <http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.8. General Enquiries

In person:

- **USC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **USC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **USC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **USC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **USC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **USC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au