



ZOOL13015 *Environmental Physiology of Animals*

Term 1 - 2019

Profile information current as at 08/05/2024 02:40 pm

All details in this unit profile for ZOOL13015 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

In Environmental Physiology of Animals you will study the physiological adaptations of animals that enable them to inhabit a range of environments and how animals can respond to environmental challenges such as climate change. You will also conduct independent literature research and examine a range of procedures and technologies used to research the environmental physiology of animals.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

BIOL11100 or BIOL12112

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 1 - 2019

- Mixed Mode

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Written Assessment**

Weighting: 40%

2. **Practical Assessment**

Weighting: 20%

3. **Examination**

Weighting: 40%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Student unit evaluation

Feedback

Weekly zoom tutorials to clarify content would be beneficial.

Recommendation

Tutorials will be considered.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Describe the functioning and control of physiological systems in a range of animals
2. Explain the physiological responses of animals to a range of environmental challenges
3. Present, analyse and interpret physiological data
4. Demonstrate a range of practical skills relevant to the study of environmental physiology.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks | Learning Outcomes | | | |
|--------------------------------|-------------------|---|---|---|
| | 1 | 2 | 3 | 4 |
| 1 - Written Assessment - 40% | • | • | | |
| 2 - Practical Assessment - 20% | • | • | • | • |
| 3 - Examination - 40% | • | • | | |

Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes | Learning Outcomes | | | |
|--------------------------|-------------------|---|---|---|
| | 1 | 2 | 3 | 4 |
| 1 - Communication | • | • | • | • |
| 2 - Problem Solving | | | • | • |
| 3 - Critical Thinking | • | • | • | |
| 4 - Information Literacy | • | • | | |

| Graduate Attributes | Learning Outcomes | | | |
|---|-------------------|---|---|---|
| | 1 | 2 | 3 | 4 |
| 5 - Team Work | | | • | • |
| 6 - Information Technology Competence | • | • | | • |
| 7 - Cross Cultural Competence | | | | |
| 8 - Ethical practice | | | | • |
| 9 - Social Innovation | | | | |
| 10 - Aboriginal and Torres Strait Islander Cultures | | | | |

Alignment of Assessment Tasks to Graduate Attributes

| Assessment Tasks | Graduate Attributes | | | | | | | | | |
|--------------------------------|---------------------|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 - Written Assessment - 40% | • | • | • | • | | • | | | | |
| 2 - Practical Assessment - 20% | • | • | | • | • | • | | • | | |
| 3 - Examination - 40% | • | • | • | | | | | | | |

Textbooks and Resources

Textbooks

There are no required textbooks.

Additional Textbook Information

Resources and readings will be available on the moodle site. Students are welcome to purchase any recent text on Animal Physiology to support their learning.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)
For further information, see the Assessment Tasks.

Teaching Contacts

Amie Anastasi Unit Coordinator

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Guy Carton Unit Coordinator

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Schedule

Week 1 - 11 Mar 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------|---|--|
| Basic Principles | Moyes & Schulte, pp 4-18 Wilmer et al, pp 3-15 | Introduce yourself on the General Discussion Forum |

Week 2 - 18 Mar 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|----------------------|--|---|
| Energy and Nutrition | Moyes & Schulte, pp 51-53, 628-631 Urry et al, pp 152-155, 166-186, 915-919 | Identify which group of animals you will be researching for your literature review and notify your course coordinator by email. |

Week 3 - 25 Mar 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------------------|--|------------------------------|
| Osmoregulation and excretion | Moyes & Schulte, pp 543-554, 580-589 Wilmer et al, pp 51-62, 70-7, 76-110 | |

Week 4 - 01 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|-----------------------------|--|--|
| Respiration and circulation | Moyes & Schulte, pp 357-372, 491-495 Hill et al, pp 583-615 Urry et al, pp 973-975 | Literature review: Send an annotated list of at least 15 relevant articles to your course coordinator. |

Week 5 - 08 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------|--|------------------------------|
| Thermoregulation | Hill et al, pp 277-289 Urry et al, pp 910-915 Sherwood et al, pp 682-704 | |

Vacation Week - 15 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|---|
| | | Send an outline of your literature review to the Unit Coordinator for feedback. Prepare for Residential School by perusing practical activities. |

Week 6 - 22 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------------|---|---|
| Nerves and Muscles | Urry et al, pp 910-915, 1096-1105, 1114-1118, 1153-1163 | Compulsory Residential School: 26 - 28 April Your Log Book must be completed and submitted before leaving Residential School |

Week 7 - 29 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

Hormones, Pheromones and Reproduction

Moyes & Schulte, pp 683, 696-698
Hill et al, pp 455-467, 476

Week 8 - 06 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|-----------------|---|------------------------------|
| Marine habitats | Moyes & Schulte, pp 548-553 Hill et al, pp 590-593 | |

Week 9 - 13 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------------------|-------------------------|---|
| Estuaries and Shorelines | Moyes & Schulte, pp 2-3 | Submit your first draft of your literature review to Turnitin for checking, then send to Unit Coordinator for feedback. |

Week 10 - 20 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---------|------------------------------|
| Freshwater and extreme aquatic habitats | | |

Week 11 - 27 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------------|----------------------------|--|
| Terrestrial ecosystems | Wilmer et al, pp 1199-1204 | Literature review is due Monday Week 12. |

Week 12 - 03 Jun 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---------|---|
| Extreme terrestrial habitats and Revision | | Literature Review Due: Week 12 Monday (3 June 2019) 5:00 pm AEST |

Review/Exam Week - 10 Jun 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---------|------------------------------|
| Revision. Exams start Thursday 13/6/19 | | |

Exam Week - 17 Jun 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

Assessment Tasks

1 Literature Review

Assessment Type

Written Assessment

Task Description

You are required to write a 4,000 to 5,000 word literature review on the following topic:

Choose a group of Australian animals from the list below and discuss their physiological and behavioural adaptations to their environment. Use this information to comment on their potential to adapt to climate change.

1. Flying Foxes
2. Tasmanian Devils
3. Wombats
4. Dunnarts

More information will be available on the Moodle site.

Assessment Due Date

Week 12 Monday (3 June 2019) 5:00 pm AEST

Return Date to Students

Exam Week Friday (21 June 2019)

Weighting

40%

Minimum mark or grade

45%

Assessment Criteria

Marks will be awarded for writing skills, content, research and referencing. Marks will not be allocated for sections that are plagiarised or copied, in line with CQU Policy. A rubric is available on the Moodle site.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Describe the functioning and control of physiological systems in a range of animals
- Explain the physiological responses of animals to a range of environmental challenges

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

2 Log Book

Assessment Type

Practical Assessment

Task Description

You are required to submit your Laboratory Log Book, including experimental data, calculations and answers to questions before leaving the Residential School. Exact details will be provided on the Moodle site and discussed at the residential school.

Assessment Due Date

You are required to submit your log book before leaving the Residential School: 5.00pm Sunday April 28th.

Return Date to Students

Week 9 Monday (13 May 2019)

Weighting

20%

Minimum mark or grade

45%

Assessment Criteria

Marks will be awarded for completeness and presentation of data, accuracy of calculations and answers to questions. Detailed marking criteria will be provided on the Moodle site.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Offline

Submission Instructions

Log books must be handed to the Unit Coordinator before leaving the residential school.

Learning Outcomes Assessed

- Describe the functioning and control of physiological systems in a range of animals
- Explain the physiological responses of animals to a range of environmental challenges
- Present, analyse and interpret physiological data
- Demonstrate a range of practical skills relevant to the study of environmental physiology.

Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Team Work
- Information Technology Competence
- Ethical practice

Examination**Outline**

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

40%

Length

120 minutes

Minimum mark or grade

45%

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem