



BIOL12112 *Animal and Plant Physiology*

Term 1 - 2020

Profile information current as at 03/05/2024 06:16 pm

All details in this unit profile for BIOL12112 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.

Corrections

Unit Profile Correction added on 28-04-20

Assessment 3 (the Final Exam) is being replaced by a 90-minute open-book, online quiz. The unit coordinator will develop a question bank with 12 sections to match the 12 weeks of content in the unit. Students will be prescribed two sections and another 3 sections will be selected at random (students will answer questions about 5 weeks of content in total). In each section there will be a mixture of easy (multiple choice, multiple answer, true/false), hard application and comprehension questions, and difficult thought provoking, problem solving and case-oriented questions. Each student will receive an equivalent number of each type of question. All students will take the exam on moodle during the same 24-hour period.

General Information

Overview

In Animal and Plant Physiology you will study the basic functioning of plants and animals. You will explore a number of major themes in biology including the integral relationship between structure and function, the maintenance of homeostasis and the principles of evolution and adaptation. You will examine major functions of living organisms such as locomotion, nutrition, respiration, circulation and reproduction. In the practical component you will gain hands-on experience of relevant laboratory and field procedures.

Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Pre-requisites BIOL11102 Life Science Laboratory and ENVR11014 Environmental Monitoring

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 - 2020

- Mixed Mode
- Rockhampton

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. **Online Quiz(zes)**

Weighting: 20%

2. **Practical Assessment**

Weighting: Pass/Fail

3. **Written Assessment**

Weighting: 30%

4. **Examination**

Weighting: 50%

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](#).

Unit Learning Outcomes

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

1. Describe the function of the major organ systems in plants and animals
2. Discuss the relationship between the structure and function of living organisms
3. Apply the concepts of homeostasis to various organ systems in plants and animals
4. Discuss the evolution and adaptation of plant and animal function in relation to the environment
5. Perform a range of practical procedures in the laboratory and the field relating to the physiology of plants and animals.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Online Quiz(zes) - 20%	•				•
2 - Written Assessment - 30%		•	•	•	
3 - Practical Assessment - 0%					•
4 - Examination - 50%	•	•	•	•	

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	•	•		•	
2 - Problem Solving			•		•
3 - Critical Thinking		•			
4 - Information Literacy				•	
5 - Team Work					•
6 - Information Technology Competence					
7 - Cross Cultural Competence					
8 - Ethical practice					
9 - Social Innovation					

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
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 - Online Quiz(zes) - 20%		•				•				
2 - Written Assessment - 30%	•			•						
3 - Practical Assessment - 0%		•			•					
4 - Examination - 50%	•	•	•							

Textbooks and Resources

Textbooks

BIOL12112

Prescribed

Campbell Biology: Australian and New Zealand Version

Edition: 11th edn (2017)

Authors: Reece, J

Pearson Australia

Sydney , NSW , Australia

ISBN: 9781488613715

Binding: Paperback

Additional Textbook Information

You may have purchased this text in the previous unit BIOL11102. Copies can be purchased at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code)

[View textbooks at the CQUniversity Bookshop](#)

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

Nathan Brooks-English Unit Coordinator
n.english@cqu.edu.au

Schedule

Week 1 - 09 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
General Concepts in Functional Biology	Study Guide Week 1	

Week 2 - 16 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Genetics and reproduction	Study Guide Week 2	

Week 3 - 23 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Development and dispersal	Study Guide Week 3	Theory Quiz A closes (Monday 8AM AEST)

Week 4 - 30 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Energy and Metabolism	Study Guide Week 4	

Week 5 - 06 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Nutrition and digestion	Study Guide Week 5	Theory Quiz B closes (Monday 8AM AEST)

Vacation Week - 13 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lecture Recess		

Week 6 - 20 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Nutrients, Water and Waste	Study Guide Week 6	

Week 7 - 27 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
No lectures		Theory Quiz C closes (Monday 8AM AEST) Residential School/Block Practicals in Rockhampton April 27-29 (8:00AM AEST Monday – 5:00PM AEST Wednesday)

Week 8 - 04 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Circulation and Gas Exchange	Study Guide Week 8	Online Practical Quizzes Due: Week 8 Friday (8 May 2020) 11:45 pm AEST

Week 9 - 11 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Defence and Protection	Study Guide Week 9	

Week 10 - 18 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Locomotion	Study Guide Week 10	Theory Quiz D closes (Monday 8AM AEST)
Week 11 - 25 May 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Signalling and Coordination	Study Guide Week 11	Research Report: Wicked Problems in Animal and Plant Physiology Due: Week 11 Friday (29 May 2020) 11:59 pm AEST
Week 12 - 01 Jun 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Ecophysiology and Unit Review	Study Guide Week 12	Theory Quiz E closes (Monday 8AM AEST)
Review/Exam Week - 08 Jun 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 15 Jun 2020		
Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

There is a compulsory residential school/block practical for this unit. Students enrolled internally will be required to attend the block practical noted in the schedule.

Assessment Tasks

1 Online Theory Quizzes

Assessment Type

Online Quiz(zes)

Task Description

Online Theory Quizzes are based on lecture and study material (so please revise the lecture and reading material associated with the weeks covered by the quiz).

For ALL students, the Online Theory Quizzes open the Friday after the weeks covered in the quiz (e.g. Theory Quiz A covers material in Weeks 1 and 2 and so opens on Friday in Week 2) and is open for 1 week + 1 weekend.

You have **30 minutes** to complete each Online Theory Quiz; make sure to submit your answers within the 30 minutes.

You can attempt each quiz a second time, but there is a 60 minute enforced delay between attempts and your highest score of the attempt/s will be the score recorded. You must make the attempt while the quiz is open.

Questions are true/false, multiple choice, mix-and-match and other formats. Because the questions are drawn at random from a question bank, you will most likely receive different questions if you make a second attempt, and you will likely receive different questions from your peers. You may not share your quiz questions with other students as this may disadvantage other students and it will be considered academic misconduct.

Number of Quizzes

5

Frequency of Quizzes

Fortnightly

Assessment Due Date

Once per fortnight from Week 2 (see the schedule of topics in this unit profile).

Return Date to Students

Once per fortnight on completion of quiz.

Weighting

20%

Minimum mark or grade

45% of available marks averaged over all quizzes.

Assessment Criteria

Correctness of final answers.

Referencing Style

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

Submission

Online

Learning Outcomes Assessed

- Describe the function of the major organ systems in plants and animals
- Perform a range of practical procedures in the laboratory and the field relating to the physiology of plants and animals.

Graduate Attributes

- Problem Solving
- Information Technology Competence

2 Online Practical Quizzes

Assessment Type

Practical Assessment

Task Description

After completing Practicals 1-6 at the Residential School/Block Practical in Rockhampton, you will be required to undertake 6 ten-minute, multiple choice Online Practical Quizzes on Moodle.

You have **10 minutes** to complete each Online Practical Quiz; make sure to submit your answers within the 10 minutes.

You can attempt each Online Practical Quiz a second time, but there is a 60 minute enforced delay between attempts and your highest score of the attempt/s will be the score recorded. You must make the attempt while the quiz is open.

50% is the minimum score for a passing mark on each quiz. You must pass 5 out of the 6 quizzes to receive a passing mark on this assessment.

Questions are true/false, multiple choice, mix-and-match and other formats. Because the questions are drawn at random from a question bank, you will most likely receive different questions if you make a second attempt, and you will likely receive different questions from your peers. You may not share your quiz questions with other students as this may disadvantage other students and it will be considered academic misconduct.

Students must attend the Residential School/Block Practicals before attempting the Online Practical Quizzes.

Assessment Due Date

Week 8 Friday (8 May 2020) 11:45 pm AEST

Return Date to Students**Weighting**

Pass/Fail

Minimum mark or grade

Students must pass at least 5 out of the 6 quizzes to pass this assessment.

Assessment Criteria

Correctness of the answers.

Referencing Style

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

Submission

Online

Learning Outcomes Assessed

- Perform a range of practical procedures in the laboratory and the field relating to the physiology of plants and animals.

Graduate Attributes

- Problem Solving
- Team Work

3 Research Report: Wicked Problems in Animal and Plant Physiology

Assessment Type

Written Assessment

Task Description

The Research Report: Wicked Problems in Animal and Plant Physiology is an opportunity to apply your learning to emerging problems in animal and plant physiology. You will be provided four questions; 2 questions related to plants and their environment, and 2 questions related to animals and their environment. The questions will consist of an animal or plant system and a scenario that impacts that animal or plant system. The question will ask you to critically analyze, describe and communicate the impact of the provided scenario on that animal's or plant's physiology citing the articles provided as well as other relevant research materials (e.g. journal articles, government reports, books, etc) obtained by you. You will pick one plant and one animal question to research and respond to the question (800 words per question (± 80 words in the main text). More details and the question choices will be provided on Moodle.

Assessment Due Date

Week 11 Friday (29 May 2020) 11:59 pm AEST

Return Date to Students

Review/Exam Week Friday (12 June 2020)

Weighting

30%

Minimum mark or grade

45

Assessment Criteria

A comprehensive assessment criteria sheet and marked exemplar are available on Moodle.

Students will be assessed on:

1. Information literacy (finding and using resources and references appropriate to the subject matter)
2. Problem solving (your ability to predict likely physiological responses)
3. Critical thinking (your ability to successfully apply your knowledge of Animal and Plant physiology to animal and plant systems and their environmental context).
4. Communication (your ability to write using grammatically correct, clear and concise Australian English and to demonstrate your ability to adhere to discipline-specific academic conventions such as biological nomenclature and citations).

Referencing Style

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

Submission

Online

Submission Instructions

Students are required to submit their assessment online as one MS Word document, including all figures, tables and references.

Learning Outcomes Assessed

- Discuss the relationship between the structure and function of living organisms
- Apply the concepts of homeostasis to various organ systems in plants and animals
- Discuss the evolution and adaptation of plant and animal function in relation to the environment

Graduate Attributes

- Communication
- Information Literacy

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

50%

Length

180 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