BIOL11099 *Living Systems*
Term 1 - 2018

Profile information current as at 06/05/2024 07:14 pm

General Information

Overview
Successful completion of this unit will provide students with an understanding of the diversity of life at the level of cells and whole organisms, together with an appreciation of a range of fundamental themes in contemporary biology, including biodiversity, ecology, heredity and evolution. In the practical component, students will gain hands-on experience of relevant laboratory and practical procedures.

Details
Career Level: *Undergraduate*
Unit Level: *Level 1*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites
There are no requisites for this unit.
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 - 2018

- Bundaberg
- Distance
- 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: 10%
2. **Practical Assessment**
Weighting: 20%
3. **Written Assessment**
Weighting: 20%
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.

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 Moodle course evaluation and student communication

Feedback
Students found seeing and experiencing living organisms in their natural habitat during their field trip was beneficial in enhancing their understanding of the course material.

Recommendation
Recommend to continue to include a field trip as part of the practical learning component

Feedback from Moodle course evaluation

Feedback
Students found the time limit on the theory quizzes too short.

Recommendation
The time limit will be increased to allow students more time with the quiz

Feedback from Moodle course evaluation and student communication

Feedback
Students enjoyed the practical laboratory sessions which enhanced their theoretical knowledge.

Recommendation
Practical laboratory session to follow the same format being in line with the lecture material

Feedback from Moodle course evaluation and student communication

Feedback
Students found the unit very information heavy with 3 hours of lecture material and a lot of reading.

Recommendation
Revisit unit structure and work load

Unit Learning Outcomes

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

1. Describe the organization of living organisms at the cellular and whole organism level
2. Explain the fundamentals of selected core themes, including cell theory, emergent properties, heredity, evolution and biodiversity and demonstrate their application across the biological and environmental sciences
3. Describe the concepts underlying current understanding of the diversity and systematics of living organisms, using appropriate sources and terminology
4. Carry out a range of laboratory and practical procedures relating to the diversity of life

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level • Introductory Level • Intermediate Level • Graduate Level ◦ Professional Level ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Online Quiz(zes) - 10%	•	•	•	
2 - Practical Assessment - 20%	•	•		•
3 - Written Assessment - 20%	•	•	•	
4 - Examination - 50%	•	•	•	

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	•	•	•	•
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 - Online Quiz(zes) - 10%	•			•		•				
2 - Practical Assessment - 20%	•		•	•						
3 - Written Assessment - 20%	•	•		•		•				
4 - Examination - 50%	•	•	•	•						

Textbooks and Resources

Textbooks

BIOL11099

Prescribed

Campbell Biology: Australian and New Zealand Edition
Edition: 10th (2015)
Authors: Reece, JB., Meyers, N., Urry, LA., Cain, ML., Wasserman, SA., Minorsky, PV., Jackson, RB & Cooke, BN.
Pearson Australia
Melbourne , Victoria , Australia
ISBN: 9781486007042
Binding: Hardcover

Additional Textbook Information
Copies of the previous edition will be acceptable. The textbook is also available as Campbell Biology Australian and New Zealand Edition VitalSource eText (10e) ISBN 9781486012299.Pearson Australia.

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Electronic copies of the textbook will be available as an alternative to the hard copy.

Referencing Style

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

Teaching Contacts

Judith Wake Unit Coordinator
j.wake@cqu.edu.au

Schedule

Week 1 - 05 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to living systems Heirarchy of classification Evolution by natural selection	Study Guide Topics 1, 2 & 3	

Week 2 - 12 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Cell theory Prokaryotes	Study Guide Topics 4 & 5	

Week 3 - 19 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Endosymbiosis Protists and multicelluarity Algae	Study Guide Topics 6 & 7	

Week 4 - 26 Mar 2018

Module/Topic	Chapter	Events and Submissions/Topic
Plants move onto land - Bryophytes and Monilophytes	Study Guide Topic 8	

Week 5 - 02 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Gymnosperms and Angiosperms	Study Guide Topic 9	**Online Theory Quizzes (1 and 2)** Due: Week 5 Friday (6 Apr 2018) 11:45 pm AEST

Vacation Week - 09 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 16 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Aquatic macrophytes and the move back to water Fungi	Study Guide Topics 10 & 11	

Week 7 - 23 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Before the Bilateria Platyhelminths and Nematodes	Study Guide Topics 12 & 13	

Week 8 - 30 Apr 2018

Module/Topic	Chapter	Events and Submissions/Topic
Annelids Molluscs	Study Guide Topics 14 & 15	

Week 9 - 07 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Arthropods Echinoderms	Study Guide Topics 16 & 17	Bundaberg students will attend compulsory practical sessions from 8.30am to 4.30pm each day from Friday 11th to Sunday 13th May.

Week 10 - 14 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
Chordates and vertebrates Mammals to humans	Study Guide Topics 18 & 19	Mixed mode students will attend a compulsory residential school from Sunday 20th to Wednesday 23rd May including a field trip to North Keppel Island.

Week 11 - 21 May 2018

Module/Topic	Chapter	Events and Submissions/Topic
No lectures		Mixed mode students will attend a compulsory residential school from Sunday 20th to Wednesday 23rd May including a field trip to North Keppel Island. Rockhampton and Bundaberg students will attend a compulsory field trip to North Keppel Island on 24th May. Geraldton students will attend a compulsory residential school in Geraldton from 24th to 27th May including a field trip.

Week 12 - 28 May 2018

Module/Topic	Chapter	Events and Submissions/Topic

Biomes and biodiversity Origin of living systems and life beyond our planet Review	Study Guide Topics 20 & 21	**Online Practical Tests** Due: Week 12 Friday (1 June 2018) 11:45 pm AEST **Media item on an organism recently discovered in Australia** Due: Week 12 Monday (28 May 2018) 11:45 pm AEST

Review/Exam Week - 04 Jun 2018

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 11 Jun 2018

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Rockhampton students will attend internal practicals during the term and a field trip to North Keppel Island on 24th May.
Bundaberg students will attend practical sessions in Bundaberg from 11th to 13th May and will travel to Rockhampton for the field trip to North Keppel Island on 24th May.
Mixed mode students will attend a four day residential school (including a field trip) in Rockhampton from 20th to 23rd May.
Geraldton students will attend a four day residential school (including a field trip) from 24th to 27th May.

Assessment Tasks

1 Online Theory Quizzes (1 and 2)

Assessment Type
Online Quiz(zes)

Task Description
There will be two timed, multiple choice online quizzes based on the lecture material from the first four weeks of term. You will be given two attempts at each quiz and the highest mark will be taken. As the questions will be taken randomly from a question bank, you may not get the same questions for each attempt.
Theory Quiz 1 will open in Week 2 and Theory Quiz 2 will open in Week 4. Both quizzes will close at the end of Week 5 on Friday 6th April at 23.45 AEST. Quiz 1 and Quiz 2 will each be worth 5% of the total course mark.

Number of Quizzes
2

Frequency of Quizzes

Assessment Due Date
Week 5 Friday (6 Apr 2018) 11:45 pm AEST

Return Date to Students
Week 6 Friday (20 Apr 2018)

Weighting
10%

Minimum mark or grade
30%

Assessment Criteria
These quizzes will be assessed on the correctness of the answers.

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Describe the organization of living organisms at the cellular and whole organism level
- Explain the fundamentals of selected core themes, including cell theory, emergent properties, heredity, evolution and biodiversity and demonstrate their application across the biological and environmental sciences
- Describe the concepts underlying current understanding of the diversity and systematics of living organisms, using appropriate sources and terminology

Graduate Attributes

- Communication
- Information Literacy
- Information Technology Competence

2 Online Practical Tests

Assessment Type
Practical Assessment

Task Description
Three tests based on the material covered in the field trip (Practical Test A) and the practical laboratory sessions (Practical Tests B and C) will be conducted online and close at the end of week 12. However, you may submit your answers anytime after the relevant online test opens (dates to be advised) and you have completed the relevant sessions. In total, this assessment is worth 20%. The test based on the field trip (Practical Test A) will be untimed and consist of short answer questions. It is worth 6% of the total marks for the unit. The tests based on the practical laboratory sessions (Practical Tests B and C) are timed, multiple choice questions and are worth 7% each (total 14% of unit marks). Only one attempt at each test will be permitted.

Assessment Due Date
Week 12 Friday (1 June 2018) 11:45 pm AEST

Return Date to Students
Review/Exam Week Friday (8 June 2018)

Weighting
20%

Minimum mark or grade
40%

Assessment Criteria
Answers will be assessed on the correctness, comprehensiveness and relevance of your answers.

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Describe the organization of living organisms at the cellular and whole organism level
- Explain the fundamentals of selected core themes, including cell theory, emergent properties, heredity, evolution and biodiversity and demonstrate their application across the biological and environmental sciences
- Carry out a range of laboratory and practical procedures relating to the diversity of life

Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy

3 Media item on an organism recently discovered in Australia

Assessment Type
Written Assessment

Task Description
This assessment requires you to research an organism that has been discovered in Australia (including surrounding waters) within the last ten years and write a 500 word article for a popular science magazine. Your article should include a description of the scientific classification (kingdom, phylum etc) and the characteristics associated with organisms in

that group (approximately 200 words). In the remaining words (approximately 300), you should describe what is interesting about the organism, what makes it different from other similar organisms, the significance of the discovery, or other relevant information that will attract and keep the audience's attention. At the end of the article, you must provide a list of the references you have used, but do not use any in-text referencing except to refer to the scientific paper that describes the species that has been discovered. As well as uploading your assignment as a Word document, you must upload a pdf of the original paper where the species is described.

Assessment Due Date
Week 12 Monday (28 May 2018) 11:45 pm AEST

Return Date to Students
Exam Week Monday (11 June 2018)

Weighting
20%

Minimum mark or grade
40%

Assessment Criteria
The complete assessment rubric will be available on the Moodle site and the criteria will include:

- Accuracy of the information about the newly discovered species and its classification
- Relevance of the material
- Accuracy of referencing
- Correct English grammar, clarity of expression and ability to engage an audience.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Upload your assignment as a word document and the original scientific paper describing the species as a pdf.

Learning Outcomes Assessed

- Describe the organization of living organisms at the cellular and whole organism level
- Explain the fundamentals of selected core themes, including cell theory, emergent properties, heredity, evolution and biodiversity and demonstrate their application across the biological and environmental sciences
- Describe the concepts underlying current understanding of the diversity and systematics of living organisms, using appropriate sources and terminology

Graduate Attributes

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

Examination

Outline
Complete an invigilated examination.

Date
During the examination period at a CQUniversity examination centre.

Weighting
50%

Length
120 minutes

Minimum mark or grade
40%

Exam Conditions
Closed Book.

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

No calculators permitted

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