

# UCC109 Biology

School: School of Education and Tertiary Access

2024 | Semester 2

UniSC Sunshine Coast  
UniSC Moreton Bay

**BLENDED  
LEARNING**

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

*Please go to [usc.edu.au](http://usc.edu.au) 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

Biology principles are foundational to understanding both ourselves and our interactions with the world around us. This course enables you to acquire fundamental knowledge in the principles of biology to support your study in undergraduate science.

### 1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
<b>BLENDED LEARNING</b>			
<b>Learning materials</b> – You are required to engage and interact with VLM (Video Learning Materials) of 40 to 60 minutes duration on a weekly basis. In addition, there may be related activities based on this content.	1hr	Week 1	12 times
<b>Tutorial/Workshop 1</b> – Tutorials are delivered face to face at the nominated campus locations.	2hrs	Week 1	13 times

### 1.3. Course Topics

Life's raw ingredients, cell types, domains and kingdoms

Water: the molecule that supports all life

Macromolecules

Cell structures and their functions

Cell membrane structure and membrane transport

Prokaryotes

Human digestive system

Evolution, classification and basic ecological concepts

Energy flow and nutrient cycling in ecosystems

## 2. What level is this course?

100 Level (Introductory)

Engaging with discipline knowledge and skills at foundational level, broad application of knowledge and skills in familiar contexts and with support. Limited or no prerequisites. Normally, associated with the first full-time study year of an undergraduate program.

## 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 Characterise the key features of prokaryotic and eukaryotic cells, the three domains and four kingdoms	Knowledgeable
2 Explain how the chemical structure of water results in its four emergent properties	Knowledgeable
3 Identify macromolecules, describe their key characteristics and provide examples.	Knowledgeable
4 Describe the structure of eukaryotic cells, naming the organelles and recalling their function	Knowledgeable
5 Describe cell membrane structure and the types of transport across the cell membrane	Knowledgeable
6 Recognise the role of prokaryotes in health, disease and ecosystems	Knowledgeable Empowered
7 Identify the structures of the human digestive system and describe their function	Knowledgeable Empowered
8 Outline the fundamental ideas in evolution theory and key themes in biology.	Knowledgeable
9 Define basic ecological concepts and outline energy flow and nutrient cycling in ecosystems	Knowledgeable Empowered
10 Comprehend and effectively communicate scientific biological information.	Creative and critical thinker Empowered

## 5. Am I eligible to enrol in this course?

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

### 5.1. Pre-requisites

Students must be enrolled in Program UC103

### 5.2. Co-requisites

Not applicable

### 5.3. Anti-requisites

Not applicable

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

Nil

## 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

The first two worksheets in your UCC109 Biology Course Workbook will be discussed in peer groups in your tutorial. This peer group work and the feedback from your tutor will provide you with the opportunity to reflect upon your learning and study skills. Support with your learning is available in the weekly consultation sessions as communicated on Canvas or with your tutor.

## 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	1a	Examination - not Centrally Scheduled	Individual	10%	45 minutes	Week 4	Online Test (Quiz)
All	1b	Examination - not Centrally Scheduled	Individual	30%	1 hour	Week 9	Online Test (Quiz)
All	2	Written Piece	Individual	20%	+/- 500 words	Week 10	Online Assignment Submission with plagiarism check
All	3	Examination - not Centrally Scheduled	Individual	40%	2 hours	Week 13	Online Test (Quiz)

### All - Assessment Task 1a: Characteristics of prokaryotic and eukaryotic cells, domains and kingdoms, water

<b>GOAL:</b>	To demonstrate knowledge of prokaryotic and eukaryotic cells, the domains and kingdoms. To explain water's chemical structure and the resultant emergent properties.					
<b>PRODUCT:</b>	Examination - not Centrally Scheduled					
<b>FORMAT:</b>	This online exam is composed of multiple choice, short answer and true or false questions. It has a duration of 45 minutes and weighting of 10%.					
<b>CRITERIA:</b>	<table border="1"> <thead> <tr> <th>No.</th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Characterisation of prokaryotic and eukaryotic cells, the three domains and four kingdoms. <b>1 2</b></td> </tr> </tbody> </table>	No.	Learning Outcome assessed	1	Characterisation of prokaryotic and eukaryotic cells, the three domains and four kingdoms. <b>1 2</b>	
No.	Learning Outcome assessed					
1	Characterisation of prokaryotic and eukaryotic cells, the three domains and four kingdoms. <b>1 2</b>					
<b>GENERIC SKILLS:</b>	Problem solving, Applying technologies					

### All - Assessment Task 1b: Macromolecules and Cells

<b>GOAL:</b>	To demonstrate identification and characterisation of macromolecules as well as knowledge of eukaryotic cell structure, their organelles and their functions.					
<b>PRODUCT:</b>	Examination - not Centrally Scheduled					
<b>FORMAT:</b>	This online exam is composed of multiple choice, short answer and true or false questions. It has a weighting of 30% and duration of 1 hour.					
<b>CRITERIA:</b>	<table border="1"> <thead> <tr> <th>No.</th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Demonstrated identification and characterisation of macromolecules. Demonstrated knowledge of eukaryotic cell structure, their organelles and their functions. <b>3 4</b></td> </tr> </tbody> </table>	No.	Learning Outcome assessed	1	Demonstrated identification and characterisation of macromolecules. Demonstrated knowledge of eukaryotic cell structure, their organelles and their functions. <b>3 4</b>	
No.	Learning Outcome assessed					
1	Demonstrated identification and characterisation of macromolecules. Demonstrated knowledge of eukaryotic cell structure, their organelles and their functions. <b>3 4</b>					
<b>GENERIC SKILLS:</b>	Problem solving					

### All - Assessment Task 2: Short response assignment

<b>GOAL:</b>	To demonstrate comprehension and effective communication of scientific biological information.	
<b>PRODUCT:</b>	Written Piece	
<b>FORMAT:</b>	Summarise the key information of two provided scientific journal articles in response to provided questions.	
<b>CRITERIA:</b>	<b>No.</b>	<b>Learning Outcome assessed</b>
	1	Comprehension and communication of scientific biological information. <b>1 6 7 10</b>
<b>GENERIC SKILLS:</b>	Communication, Organisation, Information literacy	

### All - Assessment Task 3: Cell membrane and membrane transport, prokaryotes, human digestive system, evolution, classification, ecological concepts and nutrient cycling.

<b>GOAL:</b>	To communicate course learning and integration of topics.	
<b>PRODUCT:</b>	Examination - not Centrally Scheduled	
<b>FORMAT:</b>	This online exam is composed of multiple choice, short answers and true or false questions. It has a weighting of 40% and duration of 2 hours.	
<b>CRITERIA:</b>	<b>No.</b>	<b>Learning Outcome assessed</b>
	1	Demonstrated knowledge of cell membrane and membrane transport, evolution theory, the role of prokaryotes, human digestive system, basic ecological concepts, and energy flow and nutrient cycling in ecosystems. <b>5 6 7 8 9</b>
<b>GENERIC SKILLS:</b>	Communication	

## 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. Student workload is calculated at 12.5 learning hours per one unit.

## 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 Canvas 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

No specific requirements

## 9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. 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 Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

## 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. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email [safe@usc.edu.au](mailto:safe@usc.edu.au).

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email [studentwellbeing@usc.edu.au](mailto:studentwellbeing@usc.edu.au).

## 10.5. 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](mailto:studentcentral@usc.edu.au).

## 10.6. 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](mailto:studentwellbeing@usc.edu.au) or call 07 5430 1226.

## 10.7. 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](mailto:AccessAbility@usc.edu.au) or call 07 5430 2890.

## 10.8. 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
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

## 10.9. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

## 10.10. General Enquiries

### In person:

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

**Tel:** +61 7 5430 2890

**Email:** [studentcentral@usc.edu.au](mailto:studentcentral@usc.edu.au)