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The published on-line version of the Course Profile is the authoritative version and by the publication of the Course Profile on-line the University deems the student has been notified of and read the course requirements.

# 1. General Course Information

## 1.1 Course Details

<b>COURSE CODE</b>	1041SCG
<b>COURSE TITLE</b>	Biological Systems
<b>ACADEMIC ORGANISATION</b>	ESC School of Environment and Science
<b>TRIMESTER</b>	Trimester 1 2022
<b>MODE</b>	Blended
<b>LEVEL</b>	Undergraduate
<b>LOCATION</b>	Gold Coast, On Campus
<b>CREDIT POINT VALUE</b>	10

## Course Description:

Biological Systems is an introductory course that provides an appreciation of the main concepts of modern biology. Students will gain an understanding of the origin, function and structure of living organisms by examining life at increasing levels of biological complexity, from the molecular and cellular level to whole organisms and ecosystems. Course content will be delivered through a combination of lectures, workshops, laboratory sessions and online material. Incompatible: 1601ENV Biological Systems

## Assumed Background:

Students in this course will be assumed to have fulfilled the entry requirements for Griffith Science Programs that include this as a core course.

## 1.2 Course Introduction

This course provides an introduction to the biology of organisms. It is a basic biology course that can either be used as a foundation for those not wishing to study biology further, or as essential background for students wishing to undertake further study in the biological, ecological, biomedical and biomolecular sciences. It includes an understanding of the classification of biological organisms and the underlying differences in cell structure and function of prokaryotes and eukaryotes. The course also covers mechanisms of evolution, and plant and animal biology and diversity through the understanding of central metabolic processes and an emphasis on how the structure of organisms influences the way they function in different environments.

Students are expected to spend a total of ten hours per week on average on this course during the trimester.

Note that this year students will be provided with online access to the required textbook as part of the course.

Contact summary

Teaching materials are provided on the course website that can be accessed via the Learning@Griffith link on the university homepage.

All essential information will be communicated on the announcements page on the course Learning@Griffith site.

In terms of contact with the teaching team:

- Check the Learning@Griffith site (particularly, the announcements page) first to see if you can find the answer to your question;
- Students are encouraged to ask questions in the lectures and workshops;
- Students should contact their lab/workshop demonstrator in class, if they have a problem; and, if the problem cannot be resolved, students should email the lecturer or convenor using the course email address: 1041SCG\_biolsyst@griffith.edu.au

## Previous Student Feedback

This course underwent a major change in content in 2020. Additional modifications have been made in 2022 based on student feedback; these include the introduction of a mid-trimester exam to reduce the amount of content covered in the final exam, and minor changes to practical laboratory classes to increase the amount of time dedicated to hands-on tasks.

Student feedback indicated a high level of satisfaction with this course, with students particularly enjoying the hands-on activities in the laboratory sessions.

"Wide variety of information, topics are interesting and information covered is progressive which allows a gradual build up and layering of information. Laboratories were the best part of the subject". "Very interesting content, with passionate lecturers, and very well organised..."

The most difficult aspect of this course is that it covers a lot of content: from student feedback "Content heavy. Huge volume of content to get through which made it really challenging". We highly recommend that students keep up-to-date with the lectures, study and revise throughout the trimester, and complete the fortnightly Mastering assignments to ensure that they are keeping on track. We believe that the introduction of a mid-trimester exam will help in this regard.

## 1.3 Course Staff

Primary Convenor **Dr Carmel McDougall**

**EMAIL** [c.mcdougall@griffith.edu.au](mailto:c.mcdougall@griffith.edu.au)

**CONSULTATION** Due to the number of students enrolled in this course, private consultation will only be available in special circumstances. Please email [1041SCG\\_biolsyst@griffith.edu.au](mailto:1041SCG_biolsyst@griffith.edu.au) if you have an issue that cannot be resolved during scheduled class times.

Campus Convenor **Dr Chantal Lanctot**

**EMAIL** [c.lanctot@griffith.edu.au](mailto:c.lanctot@griffith.edu.au)

**CAMPUS** Gold Coast Campus

Lecturer **Dr Shahla Hosseini Bai**

**EMAIL** [s.hosseini-bai@griffith.edu.au](mailto:s.hosseini-bai@griffith.edu.au)

Lecturer **Dr Steve Melvin**

**EMAIL** [s.melvin@griffith.edu.au](mailto:s.melvin@griffith.edu.au)

**CAMPUS** Gold Coast Campus

Lecturer **Dr Paul Oliver**

**EMAIL** [p.oliver@griffith.edu.au](mailto:p.oliver@griffith.edu.au)

**CAMPUS** Nathan Campus

Lecturer **Prof Helen Wallace**

**EMAIL** [helen.wallace@griffith.edu.au](mailto:helen.wallace@griffith.edu.au)

## 1.4 Timetable

Timetables are available on [the Programs and Courses website](#).

NB: Details contained in this Section of the course profile and Section 4.1 Learning Activities are to be read in conjunction with the official class timetable. The published class timetable which is the authoritative source for timetabling information for all campuses can be located by clicking on the above link.

### Additional Timetable Information

The course consists of lectures, laboratory classes and workshops. Attendance at Peer-Assisted Study Sessions (PASS) is also highly recommended.

There will be **3-4 hours of lectures every week**. Students are very strongly encouraged to listen to lectures and engage with the lecturers. Academic data for first year courses has conclusively shown that students who attend classes score 10% higher on their assessments.

There will be **2 hour laboratory classes in weeks 2, 4, 8, 10 and 12**. Attendance is compulsory, and all labs will be assessed.

There will be **1 hour workshops in weeks 3, 5, 7, 9 and 11**. Students are very strongly encouraged to attend workshops which will develop skills required to successfully complete the laboratory report.

There will be a **1h PASS session in all weeks** of the trimester.

See the L@G course site for further details.

## 1.5 Lecture Capture

It is standard practice at Griffith University that lectures timetabled in lecture capture-enabled venues are recorded and made available to students on the relevant course site, in accordance with the University's [Lecture Capture Policy](#).

The lecture series delivered as part of this course will be recorded and accessible via the Learning@Griffith course site.

# 2. Aims, Outcomes & Graduate Attributes

## 2.1 Course Aims

This course provides an introduction to cell biology and biological systems, including cell structure and introductory animal and plant biology. The aim is to provide the essential understanding of cells and biological systems necessary for further study in the biological, ecological, biomedical and biomolecular sciences.

During the course, you will also learn to work with other scientists as a team in the laboratory.

## 2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1 Explain biological organisms at both the cellular and whole organism level.
- 2 Acquire and apply lab skills to examine the form and function of biological systems.
- 3 Analyse and communicate results from scientific methodology in a professional scientific format.
- 4 Synthesise and apply knowledge gained towards contemporary global challenges.
- 5 Develop the professional skills required for a career in science

## 2.3. Graduate Attributes

For further details on the Griffith Graduate please [click here](#)

Griffith University prepares influential graduates to be:

- [Knowledgeable and skilled, with critical judgement](#)
- [Effective communicators and collaborators](#)
- [Innovative, creative and entrepreneurial](#)
- [Socially responsible and engaged in their communities](#)
- [Culturally capable when working with First Australians](#)
- [Effective in culturally diverse and international environments](#)

**This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.**

For further details on the Griffith Graduate Attributes please refer to [The Griffith Graduate policy](#).

University wide attributes

GRADUATE ATTRIBUTE	TAUGHT	PRACTISED	ASSESSED
Knowledgeable and skilled, with critical judgement	•	•	•
Effective communicators and collaborators	•	•	•
Innovative, creative and entrepreneurial		•	
Socially responsible and engaged in their communities	•		
Effective in culturally diverse and international environments	•	•	

# 3. Learning Resources

## 3.1 Required Resources

Details of your Required Learning Resources are available from the [Reading List](#).

## 3.2 Recommended Resources

Details of your Recommended Learning Resources are available from the [Reading List](#).

## 3.3 University Learning Resources

The University provides many facilities and support services to assist students in their studies. Links to information about University support resources that are available to students include:

**Readings:** From the reading list, students can access Required and Recommended Learning Resources through direct links to articles, ebooks, databases, websites, the Library catalogue and digitised readings in one convenient place. Students can also prioritise their readings, add personal study notes, and export citations.

**Learning@Griffith:** There is a dedicated page for this course at myGriffith.

**Academic Integrity Tutorial:** This tutorial helps students to understand what academic integrity is and why it matters. You will be

able to identify types of academic misconduct, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

**Student Support:** Provides a range of services to support students throughout their studies including personal support such as Counselling and Health Services; Academic support; and Financial and Welfare support.

**Careers and Employment:** The team provides Career Wellbeing, Career Planning and Decision Making, Finding Jobs, Skills Identification and Development, Graduate Employment Information, LinkedIn Profile Review, Interview Preparation, Online Psychometric and Aptitude Test Preparation, International Student Support, Disability Disclosure Strategies and Higher Degree Research (HDR) Career Consultations.

**Library:** The Library provides a wide range of quality client-focused services and programs to students, researchers and staff of the University. The Library works in collaboration with the academic community to achieve academic and research outcomes.

**Student Computing:** The University provides access to common use computing facilities for educational purposes.

[Griffith Information Technology Code of Practice.](#)

## 4. Teaching & Learning Activities

### 4.1 Learning Activities

Week Commencing	Activity	Learning Outcomes
14 Mar 22	<b>Cellular and Molecular Biology (Module):</b>	1, 2, 3, 4
4 Apr 22	<b>Homeostasis (Module):</b>	1, 2, 3, 4
18 Apr 22	<b>Diversity of life and animal biology (Module):</b>	1, 2, 3, 4
16 May 22	<b>Plant Biology (Module):</b>	1, 2, 3, 4
6 Jun 22	<b>Global Ecology (Module):</b>	1, 2, 3, 4

### 4.2 Other Teaching and Learning Activities Information

If any student has a disability and/or health condition that may impact on their ability to successfully undertake required learning activities in this course, they are encouraged to complete the Griffith University Disclosure Statement and advise their Course Convenor.

If a class is usually scheduled on a day that falls on a public holiday, or is cancelled for any reason, the content will be delivered online or integrated across other classes, as appropriate.

**Students Repeating a Course:** Normally, students repeating a course should not 'carry forward' marks from a previous attempt. Assessment items are usually offered to provide formative experience as well as a summative assessment. Therefore, NO MARK for any assessment item from a previous attempt will be carried forward.

During Trimester 1 there are a number of public holidays, when this happens the University can deem days. For Trimester 1, 2022 the following will apply:

Friday 15th April - Good Friday (during mid trimester break - does not impact course).

Monday 18th April - Easter Monday (no classes on Mondays, does not impact course).

Monday 25th April - Anzac Day (Monday classes will be held on Tuesday 26th, no classes scheduled, does not impact course).

Monday 2nd May - Labour Day (Monday classes will be held on Wednesday 4th, no 1041SCG lecture that day; no laboratories or workshops held that week).

For all other public holidays where a lecture or workshop class is scheduled (or is cancelled for any unexpected reason), this class will normally not be repeated.

## 5. Assessment Plan

### 5.1 Assessment Summary

This is a summary of the assessment in the course. For detailed information on each assessment, see [5.2 Assessment Detail](#) below.

ASSESSMENT TASK	DUE DATE	WEIGHTING	MARKED OUT OF	LEARNING OUTCOMES	MAXIMUM EXTENSION PERIOD
<i>Assignment - Laboratory/Laboratory Report</i> In-Lab Assessment (5x)	22 Mar 22 - 10 Jun 22	15%	15 marks	2, 3, 5	
<i>Assignment - Planning Document</i> Employability Skills	25 Mar 22 17:00 - 22 Apr 22 17:00	10%	10 marks	5	
<i>Test or quiz</i> Fortnightly quiz x 6	25 Mar 22 17:00 - 10 Jun 22 17:00 Conducted online; unlimited duration	12%	12 marks	1, 4	
<i>Exam - selected and constructed responses</i> Mid-trimester exam	6 May 22	24%	54 marks	1	
<i>Assignment - Written Assignment</i> Lab report	20 May 22 17:00 Submit via turnitin	15%	100 marks	1, 2, 4	
<i>Exam - selected and constructed responses</i> End of trimester exam	Examination Period	24%	54 marks	1, 4	

## 5.2 Assessment Detail

**Title:** In-Lab Assessment (5x)

**Type:** Assignment - Laboratory/Laboratory Report

**Learning Outcomes Assessed:** 2, 3, 5

**Due Date:**

22 Mar 22 - 10 Jun 22

**Weight:** 15%

**Marked out of:** 15

**Task Description:**

Small in-lab assessment to be **completed during all labs**. Each is worth 3%

**Criteria & Marking:**

Students have to complete an activity in the lab, and hand-in a small assessment at the end of the lab. **Each of the five in-lab assessments is worth 3% of your final mark.**

Feedback will be provided by staff in the laboratory sessions.

**Submission:** In Person at the School Department. Handed in at the end of the lab.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

**Title:** Employability Skills

**Type:** Assignment - Planning Document

**Learning Outcomes Assessed:** 5

**Due Date:**

25 Mar 22 17:00 - 22 Apr 22 17:00

**Weight:** 10%

**Marked out of:** 10

**Task Description:**

Title: Professional Development Portfolio.

Task Rationale:

Planning for your future career is not something you can leave until you graduate. There are many steps you can take while you are at university to have a positive impact on your professional development, and to help you achieve your short and long-term goals.

Assessment will be in two parts:

Stage 1: Friday 25 March, 2022, 5 pm

Stage 2: Friday 22 April, 2022, 5 pm

Weight: 10% Marked out of: 10

**Criteria & Marking:**

Task Description

Stage 1:

Weighting: 4%, Marked out of 4

Submission: Via PebblePad workbook.

Stage 2:

Weighting: 6%

Submission: Via PebblePad workbook "Submit for Assessment" tab.

Criteria for each subtask will be provided in lectures and on L@G.

**Submission:** Via the 'Assignments' tool in Learning@Griffith.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a resubmission provision

**Title:** Fortnightly quiz x 6

**Type:** Test or quiz

**Learning Outcomes Assessed:** 1, 4

**Due Date:**

25 Mar 22 17:00 - 10 Jun 22 17:00 Conducted online; unlimited duration

**Weight:** 12%

**Marked out of:** 12

**Task Description:**

Quizzes must be submitted by 5 pm on the Friday of each second week (i.e. weeks 2,4,6,8,10 and 12).

The quiz mark will be the best of 3 attempts.

All 6 quizzes will count towards your final mark.

Each of the 6 quizzes is worth 2%.

Quizzes will each cover a fortnight of material. For example the quiz due to be completed by 5 pm Friday of week 2 (25/3/22) will cover weeks 1 and 2 of course material.

**Criteria & Marking:**

Test will be conducted online.

Feedback will be provided in-class if requested.

**Submission:** Via the 'Assignments' tool in Learning@Griffith.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

**Title:** Mid-trimester exam

**Type:** Exam - selected and constructed responses

**Learning Outcomes Assessed:** 1

**Due Date:**

6 May 22

**Weight:** 24%

**Marked out of:** 54

**Perusal:** 10 minutes

**Duration:** 120 minutes

**Exam Type:** Closed Book

**Exam Format:** On Campus

**Task Description:**

Examination will be a mixture of multiple choice questions and short answer/labelling questions. Exam is closed book and no additional materials are allowed. Scientific calculator permitted. The exam will cover content covered in weeks 1-6.

**Criteria & Marking:**

Examination will be a mixture of multiple choice questions and short answer/labelling questions. Feedback will be provided to students by email if requested, after marks have been released.

**Location of Examination:** Multiple rooms across GC and NA campuses, to be advised.

**Submission:** In Person at the School Department.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision
- is a proctored examination

**Title:** Lab report

**Type:** Assignment - Written Assignment

**Learning Outcomes Assessed:** 1, 2, 4

**Due Date:**

20 May 22 17:00 Submit via turnitin

**Weight:** 15%

**Marked out of:** 100

**Task Description:**

This assessment comprises a lab report based upon one of the laboratory practical sessions.

Precise instructions on the required format and marking scheme will be given in the lab.

**Criteria & Marking:**

Marks will be awarded for completing all required aspects of the report, correct labelling of graphs and figures, correct referencing, proper grammar and spelling, and logical argumentation.

A rubric detailing the mark breakdown will be uploaded on the course website, and more details will be given during the workshops and labs.

Brief feedback will be provided via the Turnitin/Mark centre platform and will be available when marks are released.

**Submission:** Text Matching Tool - Turnitin.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a resubmission provision

**Title:** End of trimester exam

**Type:** Exam - selected and constructed responses

**Learning Outcomes Assessed:** 1, 4

**Due Date:**

Examination Period

**Weight:** 24%

**Marked out of:** 54

**Perusal:** 10 minutes

**Duration:** 120 minutes

**Exam Type:** Closed Book

**Exam Format:** On Campus

**Task Description:**

Examination will be a mixture of multiple choice questions and short answer/labelling questions. Exam is closed book and no additional materials are allowed. Scientific calculator permitted. The exam will cover all content delivered within the course.

**Criteria & Marking:**

Examination will be a mixture of multiple choice questions and short answer/labelling questions.

Feedback will be provided to students by email if requested, after marks have been released.

**This assessment item:**

- is a centrally organised activity
- is an individual activity
- does not include a self assessment activity

## 5.3 Late Submission

**For all courses (other than Honours Dissertation Courses):** Refer to the [Assessment Procedure for Students](#).

**For all Honours Dissertation courses:** Enrolment in an Honours degree shall be cancelled and the candidature terminated if the candidate fails to lodge their Honours dissertation by the prescribed date including any approved extensions.

## 5.4 Other Assessment Information

**Supplementary Assessment** is available in this course.

Supplementary assessment may be awarded if you have submitted all the assessment requirements of the course, and you have received a grade of 3 or have achieved an overall percentage equivalent to the grade of 3 or higher, but you have not achieved a pass or the required minimum mark in one or more mandatory pass components of the course.

You are allowed one attempt at a supplementary assessment item per course per trimester. If you gain a pass mark for your supplementary assessment item, you will be awarded a grade of 4.

Where you do not achieve a pass mark for the supplementary assessment item, the original grade of 3 for the course will remain, except for courses using the Medical School grading basis where a non-graded fail (NGF) is awarded.

Please see the [Assessment Procedure for Students](#) for more information.

**Final Grades**

A student's final grade for this course will be based on the aggregation and weighting of marks across assessment, any mandatory pass components and grade cut-offs. Grade cut-offs can vary, so you will need to wait for the official release of grades to be sure of your grade for this course.

- This course is a graded course (i.e 7, 6, 5, 4, 3, 2, 1).

## 6. Policies & Guidelines

This section contains the details of and links to the most relevant policies and course guidelines. For further details on University Policies please visit the [Policy Library](#)

### 6.1 Assessment Related Policies and Guidelines

**University Policies & Guidelines**

The University's policies can be found in the [Griffith Policy Library](#).

Specific assessment policies include:

- [Assessment Policy](#)
- [Assessment Procedure for Students](#)

## 6.2 Other Policies and Guidelines

### University Policies and Guidelines

Students are responsible for ensuring that they have read all sections of the Course Profile for the course/s in which they are enrolled in any enrolment period. The published online version of the Course Profile is the authoritative version and by the publication of the Course Profile online, the University deems the student has been notified of and read the course requirements. Variations to the Course Profile during the trimester of offer are not permitted except in exceptional circumstances and will be advised in writing to all enrolled students and via the [Learning@Griffith](mailto:Learning@Griffith) website. Additional information regarding the content of this course may be published on the [Learning@Griffith](mailto:Learning@Griffith) website.

#### Copyright matters

Copyright applies to all teaching materials and materials generated by students which substantially relate to Griffith University courses. *Students are warned against selling Griffith University teaching materials and their student notes online through commercial websites during and after their studies.* You will almost certainly be in breach of copyright law and Griffith's IT Code of Practice if you post these materials on the internet and commercial websites. Please refer to the [Copyright Guide for Students](#) for further information.

#### Health and Safety

Griffith University is committed to providing a safe work and study environment. However, all students, staff and visitors have an obligation to ensure the safety of themselves and those whose safety may be affected by their actions. Staff in control of learning activities will ensure as far as reasonably practical, that those activities are safe and that all safety obligations are being met. Students are required to comply with all safety instructions and are requested to report safety concerns to the University.

General health and safety information is available on the [Health, Safety and Wellbeing](#) website.

#### Other Key Student-Related Policies

All University policy documents are accessible to students via the [Griffith Policy Library](#). Links to key policy documents, in addition to those listed in 6.1 above, are included below for easy reference:

- [Student Communications Policy](#)
- [Health, Safety and Wellbeing Policy](#)
- [Student Administration Policy](#)
- [Student Charter](#)
- [Student Review and Appeals Policy](#)
- [Student Review and Appeals Procedures](#)
- [Student Complaints Policy](#)
- [Students with Disabilities Policy](#)

### Other Course Guidelines

It is essential that students refer to the course's [Learning@Griffith](mailto:Learning@Griffith) site for further information about this course.

## Learning Summary

Below is a table showing the relationship between the learning outcomes for this course, the learning activities used to develop each outcome and the assessment task used to assess each outcome.

### Learning Outcomes

After successfully completing this course you should be able to:

- 1 Explain biological organisms at both the cellular and whole organism level.
- 2 Acquire and apply lab skills to examine the form and function of biological systems.
- 3 Analyse and communicate results from scientific methodology in a professional scientific format.
- 4 Synthesise and apply knowledge gained towards contemporary global challenges.
- 5 Develop the professional skills required for a career in science

## Assessment & Learning Activities

LEARNING ACTIVITIES	LEARNING OUTCOMES				
	1	2	3	4	5
<b>Cellular and Molecular Biology (Module)</b>	●	●	●	●	
<b>Homeostasis (Module)</b>	●	●	●	●	
<b>Diversity of life and animal biology (Module)</b>	●	●	●	●	
<b>Plant Biology (Module)</b>	●	●	●	●	



LEARNING ACTIVITIES	LEARNING OUTCOMES				
	1	2	3	4	5
Global Ecology (Module)	●	●	●	●	
<b>ASSESSMENT TASKS</b>					
In-Lab Assessment (5x)		●	●		●
Employability Skills					●
Fortnightly quiz x 6	●			●	
Mid-trimester exam	●				
Lab report	●	●		●	
End of trimester exam	●			●	

## Graduate Attributes

For further details on the Griffith Graduate please [click here](#)

Griffith University prepares influential graduates to be:

- [Knowledgeable and skilled, with critical judgement](#)
- [Effective communicators and collaborators](#)
- [Innovative, creative and entrepreneurial](#)
- [Socially responsible and engaged in their communities](#)
- [Culturally capable when working with First Australians](#)
- [Effective in culturally diverse and international environments](#)

**This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.**

University wide attributes

GRADUATE ATTRIBUTE	TAUGHT	PRACTISED	ASSESSED
Knowledgeable and skilled, with critical judgement	•	•	•
Effective communicators and collaborators	•	•	•
Innovative, creative and entrepreneurial		•	
Socially responsible and engaged in their communities	•		
Culturally capable when working with First Australians			
Effective in culturally diverse and international environments	•	•	