

BIM300

Advanced Professional Skills in Biomedical Science

School: School of Health - Biomedicine

2024 | Semester 2

UniSC Sunshine Coast
UniSC Moreton BayBLENDED
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 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

This course develops professional and research skills required for a successful career in biomedical science. You will analyse and evaluate scientific research articles, boosting your problem-solving and critical-thinking skills. You will enhance your communication and interpersonal skills by engaging in different methods of scientific communication, discussing ethical considerations in scientific research and providing self and peer assessment. To improve your employability, you will learn to address selection criteria, an essential skill for successful job applications.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Asynchronous, self-directed online learning modules.	2hrs	Week 1	13 times
Tutorial/Workshop 1 – On-campus, synchronous interactive workshops	3hrs	Week 1	13 times

1.3. Course Topics

- Transferable Skills and Employability
- Searching for, Reading and Critiquing Scientific Literature
- The Role of Communication in Science
- How to Formulate a Research Question
- Experimental Design Strategies
- Importance of Statistics in Scientific Research
- Data Analysis
- Ethics and Integrity in Scientific Research

2. What level is this course?

300 Level (Graduate)

Demonstrating coherence and breadth or depth of knowledge and skills. Independent application of knowledge and skills in unfamiliar contexts. Meeting professional requirements and AQF descriptors for the degree. May require pre-requisites where discipline specific introductory or developing knowledge or skills is necessary. Normally undertaken in the third or fourth 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 Analyse and evaluate scientific data and scientific literature	Creative and critical thinker
2 Communicate science to diverse audiences using written and oral methods.	Empowered
3 Generate constructive feedback for self and peer assessment	Creative and critical thinker
4 Display organisational and planning skills for effective autonomous and collaborative learning in group work tasks	Empowered
5 Develop skills to enhance career planning and employability	Empowered
6 Reflect on ethical issues in scientific research.	Ethical

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 have completed a minimum of 144 units of study and be enrolled in SC355, SC357, SC385, SC302 or SC301.

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

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

Not applicable

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

Early feedback will be provided in class from peers and the course coordinator in the week 1, 2, 3 and 4 workshops regarding chosen topics and approaches to all assessment tasks. Formative assessment activities for assessments 1, 2 and 3 will be completed in class. An optional draft assessment can be submitted for feedback for assessment task 3.

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	1	Activity Participation	Individual	25%	Students will write responses to five selection criteria from one job advertisement.	Week 5	Online Assignment Submission with plagiarism check
All	2	Activity Participation	Group	35%	15 min presentation + 5 min Q+A	Week 8	In Class
All	3	Literature Review (or component)	Individual	40%	The structure and formatting of the article will adhere to the requirements of the Journal of Biological Chemistry (JBC).	Week 13	Online Assignment Submission with plagiarism check

All - Assessment Task 1: Employability Task

GOAL:	The goal of this written piece is to provide you the opportunity to reflect on your current skill set by addressing selection criteria for a job that interests you. This is an essential component of successful job applications.					
PRODUCT:	Activity Participation					
FORMAT:	Individual submission of a report. You will search for and identify a job vacancy that you are interested in and would consider applying for after graduation. From the selection criteria or required attributes of the job vacancy selected, you will identify five criteria to address. If you can not currently address the criteria, you should outline strategies to improve your capacity to address the criteria. Further details will be provided on the course Canvas site.					
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Developed skills to enhance career planning and employability 5</td> </tr> </tbody> </table>	No.	Learning Outcome assessed	1	Developed skills to enhance career planning and employability 5	
No.	Learning Outcome assessed					
1	Developed skills to enhance career planning and employability 5					
GENERIC SKILLS:	Communication, Organisation, Information literacy					

All - Assessment Task 2: Presentation of an Original Research Journal Article

GOAL:	This group presentation aims to assess your ability to critically analyse a scientific journal article and communicate your analyses to a general audience. You will develop skills in group work, reflection, communication and critical literature analysis.	
PRODUCT:	Activity Participation	
FORMAT:	Delivery of a 15 min group oral presentation followed by a 5 min question time. Presentations will be assessed by academics (90% of final mark) and by your peers (10% of final mark). Further details will be provided on the course Canvas site.	
CRITERIA:	No.	Learning Outcome assessed
	1	Analysis of scientific data and scientific literature 1
	2	Communication of science to a general audience 2
	3	Reflection of appropriate ethical issues of the data presented 6
	4	Generation of constructive feedback for self and peer assessment 3
	5	Displayed organisational and planning skills for effective autonomous and collaborative learning in group work tasks 4
GENERIC SKILLS:	Communication, Collaboration, Problem solving, Organisation	

All - Assessment Task 3: Writing a Literature Review

GOAL:	This written article aims to assess your ability to analyse, present and communicate scientific data in an essential format for scientific research. You will develop skills in data analysis, communication and critical literature analysis.	
PRODUCT:	Literature Review (or component)	
FORMAT:	Individual submission of a scientific review article. The topic of the article is driven by your scientific interests and will be confirmed with the course coordinator. The structure and formatting of the article will adhere to the requirements of the Journal of Biological Chemistry (JBC). Feedback will be provided on an optional, but highly encouraged, draft submission of your article. Further details will be provided on the course Canvas site. SUBMIT: Draft submission week 11, Final submission week 13	
CRITERIA:	No.	Learning Outcome assessed
	1	Analysis of scientific data and scientific literature 1
	2	Communication of science to a scientific audience 2
	3	Reflection of appropriate ethical issues related to the data analysed and presented 6
GENERIC SKILLS:	Communication, Problem solving, Organisation	

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

Not applicable

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 (the rates are cumulative):

- 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.

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.

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.

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 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 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