

BIM331 Immunology

School: School of Health - Biomedicine

2026 | Trimester 1

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 unisc.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 will advance your understanding of the complex and interesting world of your body's defence system. Immunology studies the body's defences against invading microorganisms, and the way in which these defences can break down and lead to disease. You will also discover that the immune system is impacted by physiological and environmental factors as well as aging and the course links immunological theory to the broader populations and social context.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Online learning modules including interactive concept checks and formative exercises.	2hrs	Week 1	12 times
Tutorial/Workshop 1 – Weekly interactive e-Lectorials will be delivered via Zoom	1hr	Week 1	12 times
Tutorial/Workshop 2 – Fortnightly tutorials will be delivered on campus, odd weeks of Trimester, commencing week 1.	2hrs	Week 1	6 times
Laboratory 1 – Laboratory classes are on-campus and delivered during even weeks of trimester, commencing week 2	3hrs	Week 2	5 times
Information session – Student poster conference, week 12 only, on campus	4hrs	Week 12	Once Only

1.3. Course Topics

This course covers all of the key areas of contemporary immunological knowledge including:

- Innate immunity
- Antigen processing and presentation
- T and B cell development and activation
- Vaccination technology
- Transplantation and immunotherapy
- Mechanisms responsible for immune disorders such as allergies and autoimmunity

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 MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	Australian Institute of Medical and Clinical Scientists
1 Explain, describe and analyse practical lab results, principles, theories and concepts underlying immunology.	Knowledgeable Empowered	1.1.6, 1.3.2, 1.3.7, 1.5.2, 1.5.3, 1.5.4, 1.6.2, 2.1.1, 2.2.1, 3.3.2, 6.2.3, 6.2.4
2 Articulate some aspects of the place and importance of immunological science in the prevention and treatment of disease	Sustainability-focussed	6.2.3, 6.2.4, 7.3.1
3 Utilise scientific research and link immunological issue to a broader population or social context.	Sustainability-focussed	6.2.3, 6.2.4, 7.3.1, 7.4.1, 9.1.1, 10.1.1, 10.3.2, 10.3.3, 10.4.2, 10.4.3, 10.4

* Competencies by Professional Body

CODE	COMPETENCY
AUSTRALIAN INSTITUTE OF MEDICAL AND CLINICAL SCIENTISTS	
1.1.6	Ensure the appropriateness of sample collection procedures: Collection is performed, consistent with established protocols and safe working practices.
1.3.2	Evaluate specimen suitability prior to analysis: Confirmation is made that the nature of the specimen is consistent with requested analysis.
1.3.7	Evaluate specimen suitability prior to analysis: Specimens are prepared for analysis.
1.5.2	Process specimen utilising appropriate techniques: Appropriate standards and controls are selected and prepared and testing is organised in accordance with the analytical procedures/protocol to be undertaken, the urgency, and the clinical condition being investigated.
1.5.3	Process specimen utilising appropriate techniques: Appropriate reagents are selected and prepared to ensure maintenance of quality and suitability for use.
1.5.4	Process specimen utilising appropriate techniques: Processes are performed in accordance with prescribed methods, quality procedures and accepted safe working practices.
1.6.2	Read and validate results - Equipment based testing: Validity of test results is confirmed in terms of protocols (including standards, quality control data and performance of analytical systems) and problems are identified and remedied or notified to the appropriate staff member.
2.1.1	Assess validity of data/results against possible range of outcomes: Initial observation and limited interpretation for significance of the raw data/results is undertaken.
2.2.1	Validation of results: Possible causes for implausible or inconsistent results or outcomes are determined.
3.3.2	Ensure that results with important diagnostic or treatment implications are communicated as per established protocols: Results are interpreted in the light of clinical information provided and knowledge of the test(s) and limitations.

CODE	COMPETENCY
6.2.3	Maintain and update scientific/technical knowledge and skills: Relevant scientific literature is monitored.
6.2.4	Maintain and update scientific/technical knowledge and skills: Opportunities to enhance learning from investigation of unusual clinical cases and/or results are pursued.
7.3.1	Demonstrates knowledge of contemporary ethical issues impinging on Medical Science: Data and events are critically analysed from an ethical perspective.
7.4.1	Knowledge of new tests and their potential in the laboratory: Ongoing review of current literature for information on new or improved tests or procedures is performed.
9.1.1	Research, prepare and deliver appropriate presentations: Educational topics are researched, prepared and presented to health workers and others.
10.1.1	Contribute to planning and design of research and development projects: Initiative in identifying problems and questions, which require investigation is demonstrated.
10.3.2	Evaluate results and the need for further experimental work: Contributions are made to the interpretation of results and conclusions.
10.3.3	Evaluate results and the need for further experimental work: Requirements are determined for further experimental work in consultation with collaborators.
10.4.2	Prepare and deliver report: Preparation of verbal and/or written reports or article (including for publication) is undertaken.
10.4.3	Prepare and deliver report: Report is presented for peer review.
10.4	Contribute to planning and design of research and development projects: Prepare and deliver report

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

LFS202 or LFS203 or (LFS112 and enrolled in Program SC301, SB301, SA301, SA308, SE303, UB001)

5.2. Co-requisites

LFS203 and enrolled in Program SC357 or SC355 (Associate Degree Medical Laboratory Science pathway only)

5.3. Anti-requisites

Not applicable

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

Not applicable

5.5. Microcredential Information

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 through formative online quizzes and other activities via Canvas. Answers to Task 1B laboratory questions will be discussed during laboratory sessions.

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	Portfolio	Individual	25%	Approximately 300 words x 5 sub-tasks (Weeks 2, 4, 6, 8, 10)	Throughout teaching period (refer to Format)	In Class
All	2	Quiz/zes	Individual	40%	varies, up to 40 minutes per quiz	Throughout teaching period (refer to Format)	In Class
All	3	Activity Participation	Group	35%	A0 size Poster	Week 10	Online Assignment Submission with plagiarism check

All - Assessment Task 1: Laboratory portfolio

GOAL:	To demonstrate your understanding and of key theoretical and practical concepts covered in weeks 1-10 of the course, including development of laboratory techniques relevant to immunology.													
PRODUCT:	Portfolio													
AUTHORSHIP STATEMENT:														
FORMAT:	Data presentation, analysis, and responses to short questions related to laboratory activities completed in class in weeks 2, 4, 6, 8, and 10. This will include online pre-laboratory quizzes completed prior to laboratory sessions and worksheet completion within laboratory classes. The week 6 activity will be submitted in the format of a brief laboratory report.													
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Explain and describe principles, theories and concepts underlying immunological assays</td> <td>1</td> </tr> <tr> <td>2</td> <td>Link immunological issue to a broader population or social context</td> <td>3</td> </tr> <tr> <td>3</td> <td>Scientific communication and genre conventions</td> <td>1</td> </tr> </tbody> </table>	No.		Learning Outcome assessed	1	Explain and describe principles, theories and concepts underlying immunological assays	1	2	Link immunological issue to a broader population or social context	3	3	Scientific communication and genre conventions	1	
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1	Explain and describe principles, theories and concepts underlying immunological assays	1												
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3	Scientific communication and genre conventions	1												
GENERIC SKILLS:	Communication, Collaboration, Problem solving, Organisation, Applying technologies, Information literacy													

All - Assessment Task 2: Review Quizzes

GOAL:	To demonstrate your understanding of key theoretical, practical, and clinical concepts covered in weeks 1-10 of the course	
PRODUCT:	Quiz/zes	
AUTHORSHIP STATEMENT:		
FORMAT:	Quizzes consisting of multi-choice and short answer questions, completed in weeks 3, 7 and 11	
CRITERIA:	No.	Learning Outcome assessed
	1	Explain and describe principles, theories and concepts underlying immunology and immunological assays 1
	2	Articulate the importance of immunological science in the prevention and treatment of disease; 2
	3	Link immunological issue to a broader population or social context 3
GENERIC SKILLS:	Communication, Problem solving, Organisation, Applying technologies, Information literacy	

All - Assessment Task 3: Poster Assignment

GOAL:	To demonstrate your knowledge and understanding of immunological issues and how they relate to a broader population or social context. You will work collaboratively to produce a scientific poster and develop critical appraisal skills through active participation in an end-of-semester poster conference.	
PRODUCT:	Activity Participation	
AUTHORSHIP STATEMENT:		
FORMAT:	Standard scientific poster: see Canvas for information and details. This assessment also includes submission of team evaluation and critical review components.	
CRITERIA:	No.	Learning Outcome assessed
	1	Accuracy and depth of: Explain and describe principles, theories and concepts underlying immunology 1
	2	Articulate the importance of immunological science in the treatment and prevention of disease; 2
	3	Link immunological issue to a broader population or social context 3
	4	Scientific communication and genre conventions 1 2 3
GENERIC SKILLS:	Communication, Collaboration, Organisation, Applying technologies, Information literacy	

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

You need regular access to the resource(s) below. Many texts are available as ebooks through the [Library](#) at no additional cost.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Recommended	Sharon Stranford, Judith Owen, Patricia Jones, Jenni Punt	0	Kuby's Immunology, Media Update (International Edition)	8th Edition	n/a

8.2. Specific requirements

To complete this course, students will need personal protective equipment (PPE) to be used within the laboratory classes. This includes: a clean laboratory coat, fully-enclosed footwear and safety glasses. Students must present with this PPE to gain entry to laboratory classes and assessments. Students are required to complete the online Laboratory Induction prior to gaining entry to the laboratory.

To successfully complete the UB001 Bachelor of Medical Laboratory Science (Pathology) and meet accreditation requirements of AIMS, UB001 students enrolled in BIM331 must attend and participate in all on-campus practical classes. All theory assessments will be invigilated.

9. How are risks managed in this course?

Risk assessments have been performed for all laboratory classes and a moderate level of health and safety risk exists. Moderate risks are those associated with laboratory work such as working with chemicals and hazardous substances. You will be required to undertake laboratory induction training and it is also 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:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

- Less than 15 minutes: No penalty
- From 15 minutes to 30 minutes: 20% penalty
- More than 30 minutes: 100% penalty

10.4. 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>

10.5. 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.

10.6. General Enquiries

For course-specific questions, contact your teaching staff or Course Coordinator.

For other enquiries or to access support, please contact Student Central:

- [UniSC Student Central](#)
- [UniSC Adelaide Student Central](#)