COURSE OUTLINE

MLS200 Introduction to Clinical Microbiology & Immunology

School: School of Health - Biomedicine

2026 | Trimester 1

UniSC Sunshine Coast	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 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

Clinical microbiology is the study of microorganisms which cause infections in humans, and immunology considers the body's defence mechanisms. This course introduces you to the theoretical knowledge and practical skills required to work in microbiology and immunology disciplines, and help you to develop the skills needed to work safely in a PC2 containment facility, including the processing of clinical specimens, molecular diagnostics, recording clinical laboratory results and writing clinical laboratory reports.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Fully independent asynchronous learning	2hrs	Week 1	12 times
Laboratory 1 – On-campus laboratory practicals to develop skills and gain competency in immunology laboratory techniques.	3hrs	Week 1	12 times
Tutorial/Workshop 1 – There will be 6 tutorial classes.	2hrs	Week 2	6 times

1.3. Course Topics

1. Microbiology in health and disease
2. Good microbiological aseptic techniques and working in PC2 laboratories.
3. Metabolism of microorganisms.
4. Growth and nutrition of bacterial pathogens.
5. Detecting, isolating and identifying microbial pathogens.
6. Introduction to microbial genetics and DNA/RNA detection of microorganisms.
7. Antimicrobial agents and multi-resistant microorganisms
8. Viruses and viral infections
9. Fungal and parasitic infections
10. The immune and complement system
11. B cells and antibodies
12. T cells and antigen presentation
13. Antigen & antibodies in health and disease

2. What level is this course?

200 Level (Developing)

Building on and expanding the scope of introductory knowledge and skills, developing breadth or depth and applying knowledge and skills in a new context. May require pre-requisites where discipline specific introductory knowledge or skills is necessary. Normally, undertaken in the second or third full-time year of an undergraduate programs.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES On successful completion of this course, you should be able to...	GRADUATE QUALITIES MAPPING Completing these tasks successfully will contribute to you becoming...	PROFESSIONAL STANDARD MAPPING * Australian Institute of Medical and Clinical Scientists
1 Explain the role of microorganisms in human health and disease	Knowledgeable Communication	1.3.2, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 2.1.1, 2.1.2, 2.2.1, 2.3.1, 2.2, 2.3, 3.3.1, 3.3.2, 3.3.3, 5.3.9, 6.2.3, 6.2.4, 9.3.1, 9.3.2, 9.3.3, 10.3.2
2 Compare and contrast bacterial, viral, and parasitic infections, and concepts of treatment and control.	Creative and critical thinker Communication Problem solving	1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.6.1, 1.6.2, 1.6.3, 1.6.4, 1.6.5, 1.6.6, 1.6.7, 1.6.8, 2.1.1, 2.1.2, 2.2.1, 2.3.1, 2.2, 2.3, 3.2.6, 3.2.7, 3.3.1, 3.3.2, 3.3.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8, 5.3.9, 6.2.3, 6.2.4, 7.4.1, 7.4.2, 7.4.3, 9.3.1, 9.3.2, 9.3.3, 10.3.2
3 Apply skills to detect, isolate, identify and report a range of microorganisms.	Empowered Communication Problem solving Organisation Applying technologies	1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6, 1.1.7, 1.1.8, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.3.6, 1.3.7, 1.4.1, 1.4.2, 1.4.3, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 1.6.1, 1.6.2, 1.6.3, 1.6.4, 1.6.5, 1.6.6, 1.6.7, 1.6.8, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1.1, 2.1.2, 2.2.1, 2.3.1, 2.3.2, 2.2, 2.3, 3.1.1, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 3.2, 3.3, 3.4
4 Discuss how B and T lymphocytes, and antigen and antibodies contribute to immune responses in health and disease.	Knowledgeable	1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 1.6.1, 1.6.2, 1.6.3, 1.6.4, 1.6, 2.1.1, 2.1.2, 2.2.1, 2.3.1, 2.2, 2.3, 3.3.1, 3.3.2, 3.3.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8, 5.3.9, 6.2.3, 6.2.4, 6.2.5, 6.3.1, 6.3.2, 6.3.3, 6.4.1, 6.4.2, 6.4.3, 6.3, 6.4, 9.3.1, 9.3.2, 9.3.3, 10.3.2

* Competencies by Professional Body

CODE	COMPETENCY
AUSTRALIAN INSTITUTE OF MEDICAL AND CLINICAL SCIENTISTS	
1.3.2	Evaluate specimen suitability prior to analysis: Confirmation is made that the nature of the specimen is consistent with requested analysis.
1.5.1	Process specimen utilising appropriate techniques: Appropriate test procedure is selected for the analysis required, the nature of available specimen(s) and the urgency of the request.
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.
1.6.1	Read and validate results - Equipment based testing: Laboratory instrumentation is operated within established procedures (including quality control, troubleshooting instrument problems and performing preventative and corrective maintenance).
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.

CODE	COMPETENCY
1.6.3	Read and validate results - Equipment based testing: Results are calculated from data outputs according to documented procedures.
1.6.4	Read and validate results - Equipment based testing: Test data, calculations, results and acceptance/rejection of analytical procedure outcome are documented.
1.6.5	Read and validate results - Equipment based testing: Storage/disposal of reagents, standards, controls and specimens is in accordance with regulations and guidelines where applicable.
1.6.6	Read and validate results - Observation based testing: Available clinical information is reviewed.
1.6.7	Read and validate results - Observation based testing: Critical observations are made and recorded.
1.6.8	Read and validate results - Observation based testing: Observations and evaluations are summarised, using the appropriate knowledge base, and summary is recorded according to regulatory protocols.
1.1.1	Ensure the appropriateness of sample collection procedures: Correct request form is received as set out in established protocol.
1.1.2	Ensure the appropriateness of sample collection procedures: Identification of patient and demographic information is established.
1.1.3	Ensure the appropriateness of sample collection procedures: Appropriate action is taken when request appears inconsistent with patient information data.
1.1.4	Ensure the appropriateness of sample collection procedures: Patient preparation and specimen collection is consistent with test(s) requested.
1.1.5	Ensure the appropriateness of sample collection procedures: Patient is informed of procedure, advised of possible associated risks, and agreement to proceed is obtained.
1.1.6	Ensure the appropriateness of sample collection procedures: Collection is performed, consistent with established protocols and safe working practices.
1.1.7	Ensure the appropriateness of sample collection procedures: Specimen is collected into an appropriate container, then immediately and correctly labelled according to established protocols and regulations including minimum labelling requirements.
1.1.8	Ensure the appropriateness of sample collection procedures: Specimen is transported in a safe and timely manner under appropriate conditions according to established protocols and regulations.
1.2.1	Ensure the appropriateness of specimen reception procedures: Documentation is checked to ensure it matches specimen and complies with current regulations.
1.2.2	Ensure the appropriateness of specimen reception procedures: Collection errors are identified and corrective action taken.
1.2.3	Ensure the appropriateness of specimen reception procedures: Specimen suitability for further processing is established.
1.2.4	Ensure the appropriateness of specimen reception procedures: Decision is made whether to process sub-optimal specimen, taking into account all relevant circumstances and available resources.
1.3.1	Evaluate specimen suitability prior to analysis: Correct and satisfactory labelling and matching of subject details is established.
1.3.3	Evaluate specimen suitability prior to analysis: Specimen is received in correct container (i.e., containing correct anticoagulant or fixative if appropriate) and in accordance with collection and delivery protocols.
1.3.4	Evaluate specimen suitability prior to analysis: Quality of specimen meets defined acceptability criteria.
1.3.5	Evaluate specimen suitability prior to analysis: Appropriate action, as per defined criteria, is taken upon receipt of an unsuitable specimen.
1.3.6	Evaluate specimen suitability prior to analysis: Satisfactory specimens are appropriately registered into the laboratory information system.
1.3.7	Evaluate specimen suitability prior to analysis: Specimens are prepared for analysis.

CODE	COMPETENCY
1.4.1	Determine the priority of laboratory requests (triage) to effectively manage service requirements: Priority of analysis is modified based on clinical necessity, as indicated by medical officer(s) and laboratory guidelines, then by staff and equipment availability.
1.4.2	Determine the priority of laboratory requests (triage) to effectively manage service requirements: Workload is organised to ensure optimal patient care and most efficient use of resources.
1.4.3	Determine the priority of laboratory requests (triage) to effectively manage service requirements: Workload is continually monitored and reorganised as required to accommodate changes in priority
1.5.5	Process specimen utilising appropriate techniques: Appropriate means are used to ensure outstanding specimens are followed up.
1.2	Collection, preparation and analysis of clinical material: Ensure the appropriateness of specimen reception procedures
1.3	Collection, preparation and analysis of clinical material: Evaluate specimen suitability prior to analysis
1.4	Collection, preparation and analysis of clinical material: Determine the priority of laboratory requests (triage) to effectively manage service requirements
1.5	Collection, preparation and analysis of clinical material: Process specimen utilising appropriate techniques
1.6	Collection, preparation and analysis of clinical material: Read and validate results
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.
2.1.2	Assess validity of data/results against possible range of outcomes: Implausible results, results inconsistent with clinical information or expected outcomes based on other test results or those outside defined criteria are investigated further using defined troubleshooting strategies.
2.2.1	Validation of results: Possible causes for implausible or inconsistent results or outcomes are determined.
2.3.1	Make decisions about reporting results, repeating procedures, consulting senior staff and carrying out further tests within established guidelines: Appropriate decisions about repeating procedures, carrying out further tests within established guidelines, rejection or reporting of results are made. Senior staff are appropriately consulted.
2.3.2	Make decisions about reporting results, repeating procedures, consulting senior staff and carrying out further tests within established guidelines: Rejected results are dealt with appropriately.
2.2	Correlation and validation of results of investigations using knowledge of method(s) including analytical principles and clinical information: Validation of results
2.3	Correlation and validation of results of investigations using knowledge of method(s) including analytical principles and clinical information: Make decisions about reporting results, repeating procedures, consulting senior staff and carrying out further tests within established guidelines
3.3.1	Ensure that results with important diagnostic or treatment implications are communicated as per established protocols: Significant results, as defined by the laboratory, are identified
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.
3.3.3	Ensure that results with important diagnostic or treatment implications are communicated as per established protocols: Urgent or significant results are communicated to appropriate personnel so they understand the significance, purpose of the communication and action required. This action is documented.
3.2.6	Use the administrative systems in place to communicate the results: Advice or comment pertaining to the test procedure or outcome is reported in a clear and unambiguous manner.
3.2.7	Use the administrative systems in place to communicate the results: Relevant reference intervals and, if appropriate, clinical decision limits are included in reports as per established protocols.
3.1.1	Verify report(s) with sample identification: Sample identification is traceable from patient identification to reporting.
3.2.1	Use the administrative systems in place to communicate the results: Results are communicated in a timely manner and according to laboratory protocols.

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3.2.2	Use the administrative systems in place to communicate the results: Confidentiality of results is assured at all times.
3.2.3	Use the administrative systems in place to communicate the results: Results are only given to authorised and identified persons using verification and documentation procedures according to laboratory protocols, regardless of mode of delivery (e.g., telephone, email, fax or other electronic means).
3.2.4	Use the administrative systems in place to communicate the results: Communication of results is recorded by appropriate means.
3.2.5	Use the administrative systems in place to communicate the results: Overdue results are identified and investigated.
3.4.1	Ensure appropriate storage and disposal of data and reports: All results are recorded and retained according to current regulations and guidelines.
3.4.2	Ensure appropriate storage and disposal of data and reports: Reports are disposed of according to regulations and guidelines.
3.2	Interpretation, reporting and issuing of laboratory results: Use the administrative systems in place to communicate the results
3.3	Interpretation, reporting and issuing of laboratory results: Ensure that results with important diagnostic or treatment implications are communicated as per established protocols
3.4	Interpretation, reporting and issuing of laboratory results: Ensure appropriate storage and disposal of data and reports
5.3.9	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: Laboratory workplace safety requirements are met when handling biological, chemical, toxic or radioactive substances.
5.3.1	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: The condition of biological, toxic and radioactive material is monitored on receipt and when in storage by the laboratory to ensure compliance with current legislation and guidelines.
5.3.2	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: The despatch from the laboratory of biological, chemical, toxic and radioactive material is performed in accordance with current regulation/guidelines.
5.3.3	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: The disposal of biological, chemical, toxic and radioactive material is performed as per current legislation and guidelines.
5.3.4	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: Protocols for incidents such as spills of biological, chemical, toxic and radioactive substances are followed in accordance with current regulations and guidelines.
5.3.5	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: Monitoring of the workplace and staff in areas using radioactivity is performed in accordance with current regulations and guidelines.
5.3.6	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: Staff handling radioactive substances are appropriately trained.
5.3.7	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: Staff handling cytotoxic chemicals are appropriately trained.
5.3.8	Ensure correct procedures are followed for acquisition, collection, storage, transportation and disposal of biological, chemical, toxic and radioactive wastes: Staff generating or handling genetically modified organisms are appropriately trained.
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.
6.2.5	Maintain and update scientific/technical knowledge and skills: Information from instrument/reagent manufacturers and suppliers is critically assessed.
6.3.1	Develop skills relevant to the enhancement of professional growth: An understanding of all aspects of laboratory operation and the place of laboratories in health care systems is demonstrated.

CODE	COMPETENCY
6.3.2	Develop skills relevant to the enhancement of professional growth: Initiative is shown in suggesting or volunteering for additional tasks.
6.3.3	Develop skills relevant to the enhancement of professional growth: Additional skills are developed through activities in professional organisations and/or by attending courses.
6.4.1	Recognises own abilities and level of professional competence: Work is only undertaken within the limits of one's abilities, qualifications and training.
6.4.2	Recognises own abilities and level of professional competence: Consultation with senior staff is undertaken when a situation requires expertise beyond one's own abilities and qualifications.
6.4.3	Recognises own abilities and level of professional competence: Appropriate advice and guidance is given to other staff, commensurate with experience.
6.3	Professional accountability and participation in continuing professional development: Develop skills relevant to the enhancement of professional growth
6.4	Professional accountability and participation in continuing professional development: Recognises own abilities and level of professional competence
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.
7.4.2	Knowledge of new tests and their potential in the laboratory: Recommendations regarding suitability of test(s) as replacement is made based on review of methodology, literature and/or other laboratories' procedures.
7.4.3	Knowledge of new tests and their potential in the laboratory: New tests are developed and implemented into laboratory environment.
9.3.1	Where appropriate, provide instruction on collection, testing of specimens, interpretation and significance of results and service delivery: Knowledge of pathology testing including collection, testing, result interpretation and clinical significance is demonstrated.
9.3.2	Where appropriate, provide instruction on collection, testing of specimens, interpretation and significance of results and service delivery: There is participation in relevant activities and education to foster a broad perspective on pathology.
9.3.3	Where appropriate, provide instruction on collection, testing of specimens, interpretation and significance of results and service delivery: Adequate and current information is available to staff for interpretation of test results and provision of advice.
10.3.2	Evaluate results and the need for further experimental work: Contributions are made to the interpretation of results and conclusions.

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

LFS100 and MLS101 and enrolled in UB001 or SC211

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 during tutorials and though activity participation in laboratory practical classes to help students prepare for the assessments.

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	10%	Across all practical laboratory classes (including early feedback on formative immunology tasks (non-graded) in the first third of the teaching period).	Refer to Format	In Class
All	2	Quiz/zes	Individual	30%	2hr	Week 7	In Class
All	3a	Examination - Centrally Scheduled	Individual	30%	120min + 10min perusal	Exam Period	Exam Venue
All	3b	Practical / Laboratory Skills, and Written Piece	Individual	30%	3 Hours	Week 12	In Class

All - Assessment Task 1: Practical portfolio

GOAL:	To ensure that students are actively participating in laboratory practical classes and receiving early formative feedback when applying immunology µobiology theory from learning materials.
PRODUCT:	Activity Participation
FORMAT:	Completing laboratory tasks as specified in MLS200 laboratory manual through the trimester.
CRITERIA:	

No.		Learning Outcome assessed
1	Explanation of the role of microorganisms in human health and disease	1
2	Comparison and contrast of bacterial, viral, and parasitic infections, and concepts of treatment and control.	2
3	Application of skills to detect, isolate, identify and report a range of microorganisms.	3

GENERIC SKILLS:	Communication, Problem solving, Organisation, Applying technologies

All - Assessment Task 2: Immunology concepts

GOAL:	Mid-trimester assessment of knowledge in immunology.
PRODUCT:	Quiz/zes
FORMAT:	This will take place in week 7 in the tutorial class. Students will apply the theory and techniques gained from weeks 1 to 4. The quiz will assess your knowledge & application of immunology concepts. This is a closed book, on-campus invigilated assessment.
CRITERIA:	

No.		Learning Outcome assessed
1	Discussion of how B and T lymphocytes, and antigen and antibodies contribute to immune responses in health and disease.	4

GENERIC SKILLS:	Problem solving, Organisation, Applying technologies, Information literacy

All - Assessment Task 3a: Microbiology theory assessment

GOAL:	For the student to demonstrate their knowledge and understanding of theoretical, diagnostic, practical and clinical concepts of covered in clinical microbiology, aligned with AIMS expectations of medical laboratory scientists.
PRODUCT:	Examination - Centrally Scheduled
FORMAT:	Task 3a is a closed book, on-campus invigilated, centrally scheduled examination. It will consist of multiple-choice questions, short answers questions and case studies.
CRITERIA:	

No.		Learning Outcome assessed
1	Explain the role of microorganisms in human health and disease	1
2	Compare and contrast bacterial, viral, and parasitic infections, and concepts of treatment and control.	2
3	Apply skills to detect, isolate, identify and report a range of microorganisms.	3
4	Predict how B and T lymphocytes, and antigen and antibodies contribute to immune responses in health and disease.	4

GENERIC SKILLS:	Communication, Problem solving, Organisation, Applying technologies

All - Assessment Task 3b: Microbiology Competency Assessment

GOAL:	To assess practical skills in clinical microbiology.
PRODUCT:	Practical / Laboratory Skills, and Written Piece
FORMAT:	This will be conducted at the final laboratory class of the trimester
CRITERIA:	

No.		Learning Outcome assessed
1	Explanation of the role of microorganisms in human health and disease.	1
2	Comparison and contrast of bacterial, viral, and parasitic infections, and concepts of treatment and control.	2
3	Application of skills to detect, isolate, identify and report a range of microorganisms.	3

GENERIC SKILLS:	Problem solving, Organisation, Applying technologies, Information literacy

6.4. Assessment to competency mapping

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
AIMS - COMPETENCY-BASED STANDARDS FOR MEDICAL SCIENTISTS				
			1.1.1	Taught, Practiced, Assessed
			1.1.2	Taught, Practiced, Assessed
			1.1.3	Taught, Practiced, Assessed
			1.1.4	Taught, Practiced, Assessed
			1.1.5	Taught, Practiced, Assessed
			1.1.6	Taught, Practiced, Assessed
			1.1.7	Taught, Practiced, Assessed
			1.1.8	Taught, Practiced, Assessed
			1.3.1	Taught, Practiced, Assessed
			1.3.2	Taught, Practiced, Assessed
			1.3.3	Taught, Practiced, Assessed
			1.3.4	Taught, Practiced, Assessed
			1.3.5	Taught, Practiced, Assessed
			1.3.6	Taught, Practiced, Assessed
			1.3.7	Taught, Practiced, Assessed
			1.5.1	Taught, Practiced, Assessed
			1.5.2	Taught, Practiced, Assessed
			1.5.3	Taught, Practiced, Assessed
			1.5.4	Taught, Practiced, Assessed
			1.5.5	Taught, Practiced, Assessed
			1.6.1	Taught, Practiced, Assessed
			1.6.2	Taught, Practiced, Assessed
			1.6.3	Taught, Practiced, Assessed
			1.6.4	Taught, Practiced, Assessed
			1.6.5	Taught, Practiced, Assessed
			1.6.6	Taught, Practiced, Assessed
			1.6.7	Taught, Practiced, Assessed
			1.6.8	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
	Activity Participation	Practical portfolio	2.1.1	Taught, Practiced, Assessed
			2.1.2	Taught, Practiced, Assessed
			2.2.1	Taught, Practiced, Assessed
			2.3.1	Taught, Practiced, Assessed
			2.3.2	Taught, Practiced, Assessed
			3.1.1	Taught, Practiced, Assessed
			3.2.1	Taught, Practiced, Assessed
			3.2.2	Taught, Practiced, Assessed
			3.2.3	Taught, Practiced, Assessed
			3.2.4	Taught, Practiced, Assessed
			3.2.5	Taught, Practiced, Assessed
			3.2.6	Taught, Practiced, Assessed
			3.2.7	Taught, Practiced, Assessed
			3.3.1	Taught, Practiced, Assessed
			3.3.2	Taught, Practiced, Assessed
			3.3.3	Taught, Practiced, Assessed
			4.1.1	Taught, Practiced
			4.1.2	Taught, Practiced
			4.1.3	Taught, Practiced
			4.1.4	Taught, Practiced
			4.2.1	Taught, Practiced
			4.2.2	Taught, Practiced
			4.2.3	Taught, Practiced
			4.2.4	Taught, Practiced
			4.2.5	Taught, Practiced
			5.1.1	Taught, Practiced
			5.1.2	Taught, Practiced, Assessed
			5.1.3	Taught, Practiced, Assessed
			5.1.4	Taught, Practiced, Assessed
			5.1.5	Taught, Practiced, Assessed
			5.1.6	Taught, Practiced, Assessed
			5.1.7	Taught, Practiced, Assessed
			5.2.1	Taught, Practiced, Assessed
			5.2.2	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			5.2.3	Taught, Practiced, Assessed
			5.3.1	Taught, Practiced, Assessed
			5.3.2	Taught, Practiced, Assessed
			5.3.3	Taught, Practiced, Assessed
			5.3.4	Taught, Practiced, Assessed
			5.3.5	Taught, Practiced, Assessed
			5.3.6	Taught, Practiced, Assessed
			5.3.7	Taught, Practiced, Assessed
			5.3.8	Taught, Practiced, Assessed
			5.3.9	Taught, Practiced, Assessed
			5.4.1	Taught, Practiced, Assessed
			5.4.2	Taught, Practiced, Assessed
			5.4.3	Taught, Practiced, Assessed
			5.4.4	Taught, Practiced, Assessed
			5.4.5	Taught, Practiced, Assessed
			6.4.1	Taught, Practiced
			6.4.2	Taught, Practiced
			6.4.3	Taught, Practiced
			6.4.4	Taught, Practiced
			9.4.1	Taught, Practiced, Assessed
			9.4.2	Taught, Practiced, Assessed
			1.3.1	Taught, Practiced, Assessed
			1.3.2	Taught, Practiced, Assessed
			1.3.3	Taught, Practiced, Assessed
			1.3.4	Taught, Practiced, Assessed
			1.3.5	Taught, Practiced, Assessed
			1.3.6	Taught, Practiced, Assessed
			1.3.7	Taught, Practiced, Assessed
			1.5.1	Taught, Practiced, Assessed
			1.5.2	Taught, Practiced, Assessed
			1.5.3	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
	Examination - Centrally Scheduled	Microbiology theory assessment	1.5.4	Taught, Practiced, Assessed
			1.5.5	Taught, Practiced, Assessed
			1.6.1	Taught, Practiced, Assessed
			1.6.2	Taught, Practiced, Assessed
			1.6.3	Taught, Practiced, Assessed
			1.6.4	Taught, Practiced, Assessed
			1.6.5	Taught, Practiced, Assessed
			1.6.6	Taught, Practiced, Assessed
			1.6.7	Taught, Practiced, Assessed
			1.6.8	Taught, Practiced, Assessed
			2.1.1	Taught, Practiced, Assessed
			2.1.2	Taught, Practiced, Assessed
			2.2.1	Taught, Practiced, Assessed
			2.3.1	Taught, Practiced, Assessed
			2.3.2	Taught, Practiced, Assessed
			3.3.1	Taught, Practiced, Assessed
			3.3.2	Taught, Practiced, Assessed
			3.3.3	Taught, Practiced, Assessed
			5.3.1	Taught, Practiced, Assessed
			5.3.2	Taught, Practiced, Assessed
			5.3.3	Taught, Practiced, Assessed
			5.3.4	Taught, Practiced, Assessed
			5.3.5	Taught, Practiced, Assessed
			5.3.6	Taught, Practiced, Assessed
			5.3.7	Taught, Practiced, Assessed
			5.3.8	Taught, Practiced, Assessed
			5.3.9	Taught, Practiced, Assessed
			6.2.3	Taught, Practiced, Assessed
			6.2.4	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
All delivery modes			7.2.1	Taught, Practiced, Assessed
			7.2.2	Taught, Practiced, Assessed
			7.3.1	Taught, Practiced, Assessed
			7.3.2	Taught, Practiced, Assessed
			7.3.3	Taught, Practiced, Assessed
			7.3.4	Taught, Practiced, Assessed
			7.3.5	Taught, Practiced, Assessed
			9.3.1	Taught, Practiced, Assessed
			9.3.2	Taught, Practiced, Assessed
			9.3.3	Taught, Practiced, Assessed
			1.1.1	Taught, Practiced, Assessed
			1.1.2	Taught, Practiced, Assessed
			1.1.3	Taught, Practiced, Assessed
			1.1.4	Taught, Practiced, Assessed
			1.1.5	Taught, Practiced, Assessed
			1.1.6	Taught, Practiced, Assessed
			1.1.7	Taught, Practiced, Assessed
			1.1.8	Taught, Practiced, Assessed
			1.3.1	Taught, Practiced, Assessed
			1.3.2	Taught, Practiced, Assessed
			1.3.3	Taught, Practiced, Assessed
			1.3.4	Taught, Practiced, Assessed
			1.3.5	Taught, Practiced, Assessed
			1.3.6	Taught, Practiced, Assessed
			1.3.7	Taught, Practiced, Assessed
			1.5.1	Taught, Practiced, Assessed
			1.5.2	Taught, Practiced, Assessed
			1.5.3	Taught, Practiced, Assessed
			1.5.4	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			1.5.5	Taught, Practiced, Assessed
			1.6.1	Taught, Practiced, Assessed
			1.6.2	Taught, Practiced, Assessed
			1.6.3	Taught, Practiced, Assessed
			1.6.4	Taught, Practiced, Assessed
			1.6.5	Taught, Practiced, Assessed
			1.6.6	Taught, Practiced, Assessed
			1.6.7	Taught, Practiced, Assessed
			1.6.8	Taught, Practiced, Assessed
			2.1.1	Taught, Practiced, Assessed
			2.1.2	Taught, Practiced, Assessed
			2.2.1	Taught, Practiced, Assessed
			2.3.1	Taught, Practiced, Assessed
			2.3.2	Taught, Practiced, Assessed
			3.1.1	Taught, Practiced, Assessed
			3.2.1	Taught, Practiced, Assessed
			3.2.2	Taught, Practiced, Assessed
			3.2.3	Taught, Practiced, Assessed
			3.2.4	Taught, Practiced, Assessed
			3.2.5	Taught, Practiced, Assessed
			3.2.6	Taught, Practiced, Assessed
			3.2.7	Taught, Practiced, Assessed
			3.3.1	Taught, Practiced, Assessed
			3.3.2	Taught, Practiced, Assessed
			3.3.3	Taught, Practiced, Assessed
			3.4.1	Taught, Practiced, Assessed
	Practical / Laboratory Skills, and Written Piece	Microbiology Competency Assessment	3.4.2	Taught, Practiced, Assessed
			4.1.1	Taught, Practiced, Assessed
			4.1.2	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			4.1.3	Taught, Practiced, Assessed
			4.1.4	Taught, Practiced, Assessed
			4.2.1	Taught, Practiced, Assessed
			4.2.2	Taught, Practiced, Assessed
			4.2.3	Taught, Practiced, Assessed
			4.2.4	Taught, Practiced, Assessed
			4.2.5	Taught, Practiced, Assessed
			5.1.1	Taught, Practiced, Assessed
			5.1.2	Taught, Practiced, Assessed
			5.1.3	Taught, Practiced, Assessed
			5.1.4	Taught, Practiced, Assessed
			5.1.5	Taught, Practiced, Assessed
			5.1.6	Taught, Practiced, Assessed
			5.1.7	Taught, Practiced, Assessed
			5.2.1	Taught, Practiced, Assessed
			5.2.2	Taught, Practiced, Assessed
			5.2.3	Taught, Practiced, Assessed
			5.3.1	Taught, Practiced, Assessed
			5.3.2	Taught, Practiced, Assessed
			5.3.3	Taught, Practiced, Assessed
			5.3.4	Taught, Practiced, Assessed
			5.3.5	Taught, Practiced, Assessed
			5.3.6	Taught, Practiced, Assessed
			5.3.7	Taught, Practiced, Assessed
			5.3.8	Taught, Practiced, Assessed
			5.3.9	Taught, Practiced, Assessed
			5.4.1	Taught, Practiced, Assessed
			5.4.2	Taught, Practiced, Assessed
			5.4.3	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			5.4.4	Taught, Practiced, Assessed
			5.4.5	Taught, Practiced, Assessed
			6.4.1	Taught, Practiced, Assessed
			6.4.2	Taught, Practiced, Assessed
			6.4.3	Taught, Practiced, Assessed
			6.4.4	Taught, Practiced, Assessed
			7.1.1	Taught, Practiced, Assessed
			7.1.2	Taught, Practiced, Assessed
			7.2.1	Taught, Practiced, Assessed
			7.2.2	Taught, Practiced, Assessed
			9.4.1	Taught, Practiced, Assessed
			9.4.2	Taught, Practiced, Assessed
	Quiz/zes	Immunology concepts	1.5.1	Taught, Practiced, Assessed
			1.5.2	Taught, Practiced, Assessed
			1.5.3	Taught, Practiced, Assessed
			1.5.4	Taught, Practiced, Assessed
			1.6.1	Taught, Practiced, Assessed
			1.6.2	Taught, Practiced, Assessed
			1.6.3	Taught, Practiced, Assessed
			1.6.4	Taught, Practiced, Assessed
			2.1.1	Taught, Practiced, Assessed
			2.1.2	Taught, Practiced, Assessed
			2.2.1	Taught, Practiced, Assessed
			2.3.1	Taught, Practiced, Assessed
			3.3.1	Taught, Practiced, Assessed
			3.3.2	Taught, Practiced, Assessed
			3.3.3	Taught, Practiced, Assessed
			5.3.9	Taught, Practiced
			6.2.3	Taught, Practiced, Assessed
			6.2.4	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			9.3.1	Taught, Practiced, Assessed
			9.3.2	Taught, Practiced, Assessed
			9.3.3	Taught, Practiced, Assessed

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

To successfully complete the UB001 Bachelor of Medical Laboratory Science (Pathology) and meet accreditation requirements of AIMS, UB001 students enrolled in MLS200 must attend and participate in all on-campus practical classes. All final theory assessments will be invigilated. UB001 students must attain ≥50% for theory and ≥50% laboratory practical assessment.

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. 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 or using the SafeZone app. For general enquires contact the SafeUniSC team by phone 07 5456 3864 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 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