COURSE OUTLINE

MLS402 Medical Laboratory Placement 3

School: School of Health - Biomedicine

2027 | Session 2

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 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

Through this placement, you will be involved with professional practice within an accredited (ISO 15189 standards and NATA-approved) medical pathology laboratory. You will be exposed to authentic, high quality and sustainable professional practice in which you will gain experience in laboratory operations, including confidentiality and privacy obligations, occupational health and safety matters, quality control practices, professional ethics, and laboratory management and administration.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Information session – This information session will provide further details regarding your placement and the associated assessment tasks.	1hr	Week 1	Once Only
Placement – This course involves a 40 day full-time work-integrated learning placement within a pathology laboratory located in metropolitan, regional or rural areas of Queensland. Students must fulfill vaccination requirement and may be required to travel, at their own expense, to complete placement.	300hrs	Throughout teaching period (refer to Format)	Once Only

1.3. Course Topics

Work-integrated learning in one or more of the following discipline fields:

- Pre-analytical
- Histology and Cytology (Anatomical Pathology)
- Haematology
- Immunohaematology (Blood Banking)
- Clinical Chemistry (Biochemistry)
- Microbiology
- Immunology
- Other specialised areas of pathology

2. What level is this course?

400 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?

24 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 Demonstrate, with increasing autonomy, the knowledge and technical skills required to complete pathology testing protocols, interpret and integrate laboratory data from various sources, solve problems, inform decisions and provide advice to other health professionals.	Knowledgeable Information literacy	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, 2.1.1, 2.1.2, 2.2.1, 2.3.1, 2.3.2, 2.1, 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, 4.4.1, 5.1.1, 7.1.1, 7.1.2, 7.2.1, 7.2.2
2 Understand the organisational, administrative and staffing structures of the pathology laboratory in which placement is being undertaken and the role of the pathology service in the broader context of health care services.	Engaged Organisation	8.1.1, 8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.4.1, 8.4.2, 8.4.3, 8.4.4, 9.1.1, 9.2.1, 9.3.1, 9.3.2, 9.3.3, 9.4.1, 9.4.2, 9.4, 10.1.1, 10.1.2
3 Demonstrate ethical behaviour and professionalism in a clinical environment.	Ethical Collaboration	3.2.2, 3.4.1, 3.4.2, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.4.1, 4.4.2, 4.4.3, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7, 5.2.1, 5.2.2, 5.2.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.9, 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 6.4.1, 6.4.2, 6.4.3, 6.4.4, 6.5.1, 6.5.2, 6.5.3, 6.5.4, 6.5.5, 6.5.6, 6.5.7, 7.1.1, 7.1.2, 7.2.1, 7.2.2, 7.3.1, 7.3.2, 7.3.3, 7.3.4, 7.3.5, 8.1.2, 8.1.3, 8.2.1, 8.2.2, 8.3.3, 8.4.2
4 Understand the governmental and accrediting body regulations and standards applicable to pathology laboratories in Australia.	Empowered Information literacy	1.6.2, 1.6.5, 3.4.1, 3.4.2, 4.1.1, 4.1.3, 4.3.3, 5.1.2, 5.1.4, 5.1.5, 5.1.6, 5.2.1, 5.2.2, 5.2.3, 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, 6.5.6, 9.4.1
5 Recognise the significance of continuing professional development and development of a professional community.	Engaged	6.1.1, 6.1.2, 6.1.3, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.3.1, 6.3.2, 6.3.3, 7.4.1, 7.4.2, 7.4.3, 9.1.1, 9.2.1, 9.3.1, 9.3.2, 9.3.3, 9.4.1, 9.4.2, 10.1, 10.2, 10.3, 10.4

* Competencies by Professional Body

CODE	COMPETENCY
AUSTRALIAN INSTITUTE OF MEDICAL AND CLINICAL SCIENTISTS	

CODE	COMPETENCY
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.
1.3.2	Evaluate specimen suitability prior to analysis: Confirmation is made that the nature of the specimen is consistent with requested analysis.
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.
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
1.5.1	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.
1.5.5	Process specimen utilising appropriate techniques: Appropriate means are used to ensure outstanding specimens are followed up.
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.
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.

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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.
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.
2.1	Correlation and validation of results of investigations using knowledge of method(s) including analytical principles and clinical information: Assess validity of data/results against possible range of outcomes
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.
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.
3.2.6	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.
3.3.1	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.
3.4.1	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.
4.4.1	Ensure appropriate resources are available to the laboratory: Adequate and up-to-date information is utilised at time and point of need to assist in interpretation of test results and provision of advice, commensurate with experience.

CODE	COMPETENCY
4.1.1	Coordinate supplies of stocks and reagents: Conditions of receipt and storage of laboratory supplies are according to manufacturers' specifications and current safety and quarantine regulations.
4.1.2	Coordinate supplies of stocks and reagents: Stock supplies are maintained.
4.1.3	Coordinate supplies of stocks and reagents: Expired or dangerous materials are disposed of according to regulations.
4.1.4	Coordinate supplies of stocks and reagents: Inadequate stocks (e.g., expired reagents, contaminated reagents) are notified to the responsible staff member/unit and are appropriately quarantined to prevent inadvertent use.
4.2.1	Participate in maintenance of the laboratory and equipment: Preventive maintenance protocols are enacted and actions recorded.
4.2.2	Participate in maintenance of the laboratory and equipment: Equipment maintenance by supplier is checked against laboratory requirements.
4.2.3	Participate in maintenance of the laboratory and equipment: Equipment is calibrated against specified standards on a regular basis.
4.2.4	Participate in maintenance of the laboratory and equipment: The status of the laboratory environment is monitored and any deficiencies detected are rectified and/or reported.
4.2.5	Participate in maintenance of the laboratory and equipment: Safety protocols for equipment are maintained e.g., electrical checks, safety guards in place.
4.2.6	Participate in maintenance of the laboratory and equipment: Risk assessments are performed for any deviation to recommended instrument safety protocols.
4.3.1	Participate in preparation and revision of manuals and protocols: Methods are regularly monitored for necessary update/modification.
4.3.2	Participate in preparation and revision of manuals and protocols: Existing documentation is assembled and checked for appropriate references.
4.3.3	Participate in preparation and revision of manuals and protocols: Relevant guidelines for content of manuals and regulatory requirements are followed.
4.3.4	Participate in preparation and revision of manuals and protocols: Consultation with peers and senior staff is undertaken to discuss applicability, relevance and need for changes to any existing documentation.
4.3.5	Participate in preparation and revision of manuals and protocols: Proposed changes to any existing documentation are discussed with, and approved by, senior staff.
4.3.6	Participate in preparation and revision of manuals and protocols: Changes to documentation are effectively communicated to all relevant staff.
4.4.2	Ensure appropriate resources are available to the laboratory: Requirements for staffing resources are communicated to appropriate authorities.
4.4.3	Ensure appropriate resources are available to the laboratory: Requirements for equipment are communicated to appropriate authorities.
5.1.1	Prepare and store reagents and solutions: Reagents and solutions are prepared using established protocols.
5.1.2	Prepare and store reagents and solutions: Reagents are labelled according to legislative guidelines.
5.1.3	Prepare and store reagents and solutions: An up-to-date inventory of hazardous reagents, Material Safety Data Sheets and supplies is maintained.
5.1.4	Prepare and store reagents and solutions: Reagents are stored in the correct facilities and under the correct conditions.
5.1.5	Prepare and store reagents and solutions: Reagents are handled as required by regulatory guidelines.
5.1.6	Prepare and store reagents and solutions: Expired reagents and solutions are disposed of according to safety precautions.
5.1.7	Prepare and store reagents and solutions: Reagent inventory is periodically reviewed and hazardous reagents no longer in use are disposed of in a timely manner.

CODE	COMPETENCY
5.2.1	Identify and respond to unsafe work practices and breaches of regulations: All safe work practices (as laid down by legislative guidelines) are understood and promoted.
5.2.2	Identify and respond to unsafe work practices and breaches of regulations: Methods/protocols do not incorporate unsafe work practice.
5.2.3	Identify and respond to unsafe work practices and breaches of regulations: Upon identification or suspicion, unsafe or improper practices are notified to senior staff with suggestions for improvement where appropriate.
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.
5.3.9	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.
5.4.1	Respond appropriately to emergency situations: Appropriate safety equipment and personal protective equipment (PPE) is available and used according to documented protocols.
5.4.2	Respond appropriately to emergency situations: Possible interactions of the various chemicals, reagents and biological material and potential hazards are known.
5.4.3	Respond appropriately to emergency situations: Knowledge and skill in using safety equipment to respond appropriately to emergencies is developed, maintained and documented.
5.4.4	Respond appropriately to emergency situations: Appropriate actions are taken as described in safety manuals.
5.4.5	Respond appropriately to emergency situations: Any emergency or safety related incidents are recorded and appropriately notified.
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.
6.4.1	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.
6.4.4	Recognises own abilities and level of professional competence: An appropriate example is set for other staff in the workplace.

CODE	COMPETENCY
6.5.1	Complies with profession's code of ethics: Decisions are made in a transparent, ethical, accountable and professional manner and conduct is demonstrated in a non-discriminatory manner.
6.5.2	Complies with profession's code of ethics: Professional judgement, skill and care are exercised to optimal standard and in such a way as to bring credit to the profession.
6.5.3	Complies with profession's code of ethics: Practices detrimental to patients and others are avoided.
6.5.4	Complies with profession's code of ethics: Confidential information gained in a professional capacity is not disclosed to unauthorised persons.
6.5.5	Complies with profession's code of ethics: Professional competence is maintained throughout career.
6.5.6	Complies with profession's code of ethics: Appropriate safety regulations are always followed.
6.5.7	Complies with profession's code of ethics: A responsible approach to the community and the environment with respect to the handling and disposal of hazardous materials is maintained.
6.1.1	Establish and communicate personal goals in professional development: Realistic personal professional development goals are identified.
6.1.2	Establish and communicate personal goals in professional development: Goals are discussed and modified in consultation with relevant personnel.
6.1.3	Establish and communicate personal goals in professional development: A program for professional development is established.
6.2.1	Maintain and update scientific/technical knowledge and skills: There is participation in formal CPD program (such as APACE) if available.
6.2.2	Maintain and update scientific/technical knowledge and skills: Relevant scientific meetings are attended.
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.
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.
7.1.1	Accepts responsibility for own actions/omissions: Tasks are delegated to other medical scientists and technical staff commensurate with their abilities and scope of practice.
7.1.2	Accepts responsibility for own actions/omissions: Tasks are checked to ensure they are completed.
7.2.1	Makes independent, professional judgements: Problems are solved using sound judgement based upon knowledge and practical experience.
7.2.2	Makes independent, professional judgements: Implications associated with various outcomes of decision-making are recognised and understood.
7.3.1	Demonstrates knowledge of contemporary ethical issues impinging on Medical Science: Data and events are critically analysed from an ethical perspective.
7.3.2	Demonstrates knowledge of contemporary ethical issues impinging on Medical Science: Rights of individuals/groups are recognised and protected.
7.3.3	Demonstrates knowledge of contemporary ethical issues impinging on Medical Science: Ethical problems and/or dilemmas in the workplace are identified and resolved appropriately or referred to a higher authority.

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7.3.4	Demonstrates knowledge of contemporary ethical issues impinging on Medical Science: Unprofessional conduct is identified and dealt with or notified accordingly.
7.3.5	Demonstrates knowledge of contemporary ethical issues impinging on Medical Science: Serious misconduct is reported to appropriate authorities.
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.
8.1.1	Participate in quality improvement activities: Interactions of pathology with other components of the health service are identified and developed.
8.3.1	Establish and maintain relationships with suppliers: In-house and external suppliers of goods and services to the laboratory are identified and an up to date list of contacts of suppliers of goods and services is maintained.
8.3.2	Establish and maintain relationships with suppliers: Effective communication channels with suppliers are developed and maintained.
8.3.3	Establish and maintain relationships with suppliers: Confidential information is not disclosed to suppliers.
8.3.4	Establish and maintain relationships with suppliers: Critical aspects of supplier performance are agreed between the laboratory and the supplier and performance is reviewed in line with these.
8.4.1	Establish and maintain relationships with service users: Effective communication channels with service users are developed and maintained.
8.4.2	Establish and maintain relationships with service users: Confidentiality is maintained during service delivery.
8.4.3	Establish and maintain relationships with service users: Key performance indicators (identified by discussion with the users of the laboratory service) are agreed and monitored by the laboratory to ensure that the laboratory service meets the needs of its clients.
8.4.4	Establish and maintain relationships with service users: There is participation in relevant activities that foster a broad perspective on service delivery.
8.1.2	Participate in quality improvement activities: Quality issues are documented and brought to the attention of senior staff.
8.1.3	Participate in quality improvement activities: Suggestions for the better performance of the laboratory are made and different options are evaluated.
8.2.1	Continually review laboratory processes and testing to streamline, minimise waste and increase efficiency: Cost effective improvements to laboratory procedures or protocols are suggested.
8.2.2	Continually review laboratory processes and testing to streamline, minimise waste and increase efficiency: Changes in response to technology improvements that improve processes, enhance outcomes, efficiencies and economies, minimise waste and are environmentally responsible are implemented.
9.1.1	Research, prepare and deliver appropriate presentations: Educational topics are researched, prepared and presented to health workers and others.
9.2.1	Participate in interdepartmental and other meetings: Regular participation in inter or intra departmental meetings and/or intra laboratory meetings is performed.
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.

CODE	COMPETENCY
9.4.1	Train personnel in the operation of instruments and equipment, the performance of methods and quality control procedures, patient confidentiality, and the observation of safety measures: Training complies with the requirements of ISO15189 or equivalent standard.
9.4.2	Train personnel in the operation of instruments and equipment, the performance of methods and quality control procedures, patient confidentiality, and the observation of safety measures: Feedback systems are established to assess effectiveness of presentation/training.
9.4	Participation in education and training of health workers and others: Train personnel in the operation of instruments and equipment, the performance of methods and quality control procedures, patient confidentiality, and the observation of safety measures
10.1.1	Contribute to planning and design of research and development projects: Initiative in identifying problems and questions, which require investigation is demonstrated.
10.1.2	Contribute to planning and design of research and development projects: The need for research or development activities is communicated to colleagues.
10.1	Contribution to advancement of knowledge and improvement of laboratory practice: Contribute to planning and design of research and development projects
10.2	Contribution to advancement of knowledge and improvement of laboratory practice: Follow research/development protocol
10.3	Contribution to advancement of knowledge and improvement of laboratory practice: Evaluate results and the need for further experimental work
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

MLS231 and MLS400

5.2. Co-requisites

Not applicable

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

Limited Grading (PNP)

Pass (PU), Fail (UF). All assessment tasks are required to be passed for successful completion of the course.

6.2. Details of early feedback on progress

Formative - Students and their on-site supervisors will be asked to complete a progress feedback report at the end of week 1 of placement to identify any issues early in the placement.
Summative - Students will submit weekly written reports addressing various aspects of pathology and will receive feedback on these within a week.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Portfolio	Individual	Throughout the placement.	Throughout teaching period (refer to Format)	Online Assignment Submission with plagiarism check
All	2	Case Study	Individual	Data/information collection occurs throughout placement. Narrated PowerPoint presentation should be 12-15 minutes in length.	Refer to Format	Online Submission
All	3	Placement performance	Individual	Student: Completion of report template including 500 word written reflection on readiness to enter pathology industry. Laboratory Supervisor will also be asked for feedback on your performance.	Refer to Format	Online Submission

All - Assessment Task 1: Investigating the range of activities performed by pathology services

GOAL:	To develop a deeper understanding of activities undertaken within a pathology laboratory beyond direct sample testing. Students will examine organisational, administrative and staffing arrangements and the role of pathology services and staff in the broader context of the healthcare system.
PRODUCT:	Portfolio
AUTHORSHIP STATEMENT:	
FORMAT:	A weekly written response (max. 500 words each) to a pre-defined topic. Each submission will be due on Monday of the following week (i.e. Week 1 submission due Monday of Week 2, Week 2 submission due Monday of Week 3, and so on). Students will also be required to submit a validated timesheet demonstrating the completion of 40 days (300 hours) of placement.
CRITERIA:	**No.** — **Learning Outcome assessed** 1 — Demonstrate an understanding of the broad range of activities undertaken by pathology services. — 2 3 4 5 2 — Demonstrate the completion of 40 days (approximately 300 hours) of placement. — 1 3 5
GENERIC SKILLS:	Communication, Information literacy

All - Assessment Task 2: Case study

GOAL:	Investigate and present a real-life (de-identified) case study integrating knowledge of diseases and disease processes, interpretation of results from pathology testing performed in a variety of disciplines, critically assessing how pathology testing supports a diagnosis.
PRODUCT:	Case Study
AUTHORSHIP STATEMENT:	
FORMAT:	Students are to follow a real-life case whilst on placement then create a de-identified narrated PowerPoint presentation outlining aetiology, pathophysiology, pathology testing undertaken, describe how pathology test results support the diagnosis, treatment and prognosis. To be submitted within two weeks of placement completion.

CRITERIA:

No.		Learning Outcome assessed
1	Demonstrate an understanding of disease and disease processes.	1
2	Demonstrate understanding of how results from pathology tests performed across a range of disciplines integrate to support a diagnosis.	1
3	Critically assess the range of tests performed and suggest additional testing that might be appropriate in this case.	1 2 3
4	Presents a coherent and logical case study in a well-designed and narrated PowerPoint presentation.	1 3 5

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

All - Assessment Task 3: Performance appraisal

GOAL:	To assess suitability for future employment as a Medical Laboratory Scientist (Graduate entry level).
PRODUCT:	Placement performance
AUTHORSHIP STATEMENT:	
FORMAT:	At the completion of your placement, you will reflect on and assess your own performance against the AIMS Competency Standards (see Canvas for report template). Online submission within one week of placement completion. Your laboratory supervisor will also be invited to comment upon your performance whilst on placement. A report template will be sent directly to your supervisor.

CRITERIA:

No.		Learning Outcome assessed
1	Demonstrates the knowledge and skills required to enter the pathology industry at a graduate scientist level.	1
2	Communicates well with laboratory staff, supervisors and clients and works effectively in multidisciplinary teams to contribute to the health and well-being of patients/clients.	1 2 3
3	Acts professionally and adheres to the 'Code of Conduct for Medical Laboratory Science students on work placement' throughout placement.	3 4
4	Takes opportunities to further knowledge/skills.	1 5

GENERIC SKILLS:	Communication, Collaboration, 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				
All delivery modes	Case Study	Case study	1.5.1	Taught, Practiced, Assessed
			1.6.2	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
			3.2.2	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
			4.4.1	Taught, Practiced, Assessed
			6.2.3	Taught, Practiced, Assessed
			6.2.4	Taught, Practiced, Assessed
			6.2.5	Taught, Practiced, Assessed
			6.3.1	Taught, Practiced, Assessed
			6.4.2	Taught, Practiced, Assessed
			6.5.1	Taught, Practiced, Assessed
			6.5.2	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			6.5.3	Taught, Practiced, Assessed
			6.5.4	Taught, Practiced, Assessed
			7.2.1	Taught, Practiced, Assessed
			7.2.2	Taught, Practiced, Assessed
			7.3.1	Taught, Practiced, Assessed
			7.3.2	Taught, Practiced, Assessed
			7.4.1	Taught, Practiced, Assessed
			7.4.2	Taught, Practiced, Assessed
			7.4.3	Taught, Practiced, Assessed
			8.1.1	Taught, Practiced, Assessed
			9.1.1	Taught, Practiced, Assessed
			9.3.1	Taught, Practiced, Assessed
			9.3.2	Taught, Practiced, Assessed
			10.1.1	Taught, Practiced, Assessed
			10.3.2	Taught, Practiced, Assessed
			10.4.1	Taught, Practiced, Assessed
			10.4.2	Taught, Practiced, Assessed
			10.4.3	Taught, Practiced, Assessed
	Placement performance	Performance appraisal	1.2.1	Taught, Practiced, Assessed
			1.2.2	Taught, Practiced, Assessed
			1.2.3	Taught, Practiced, Assessed
			1.2.4	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			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
			1.4.1	Taught, Practiced, Assessed
			1.4.2	Taught, Practiced, Assessed
			1.4.3	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

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			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
			3.4.2	Taught, Practiced, Assessed
			4.1.1	Taught, Practiced, Assessed
			4.1.2	Taught, Practiced, Assessed
			4.1.3	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			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
			4.4.1	Taught, Practiced, Assessed
			5.1.1	Taught, Practiced, Assessed
			5.1.2	Taught, Practiced, Assessed
			5.1.4	Taught, Practiced, Assessed
			5.1.5	Taught, Practiced, Assessed
			5.1.6	Taught, Practiced, Assessed
			5.2.1	Taught, Practiced, Assessed
			5.3.1	Taught, Practiced, Assessed
			5.3.3	Taught, Practiced, Assessed
			5.3.9	Taught, Practiced, Assessed
			5.4.1	Taught, Practiced, Assessed
			5.4.4	Taught, Practiced, Assessed
			5.4.5	Taught, Practiced, Assessed
			6.1.1	Taught, Practiced, Assessed
			6.1.2	Taught, Practiced, Assessed
			6.2.4	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			6.3.1	Taught, Practiced, Assessed
			6.3.2	Taught, Practiced, Assessed
			6.3.3	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
			6.5.1	Taught, Practiced, Assessed
			6.5.2	Taught, Practiced, Assessed
			6.5.3	Taught, Practiced, Assessed
			6.5.4	Taught, Practiced, Assessed
			6.5.6	Taught, Practiced, Assessed
			6.5.7	Taught, Practiced, Assessed
			7.1.2	Taught, Practiced, Assessed
			7.2.1	Taught, Practiced, Assessed
			7.2.2	Taught, Practiced, Assessed
			7.3.1	Taught, Practiced, Assessed
			7.3.4	Taught, Practiced, Assessed
			7.3.5	Taught, Practiced, Assessed
			8.1.1	Taught, Practiced, Assessed
			8.4.1	Taught, Practiced, Assessed
			8.4.2	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			8.4.4	Taught, Practiced, Assessed
			9.3.1	Taught, Practiced, Assessed
			9.3.2	Taught, Practiced, Assessed
	Portfolio	Investigating the range of activities performed by pathology services	3.2.1	Taught, Practiced, Assessed
			3.4.1	Taught, Practiced, Assessed
			3.4.2	Taught, Practiced, Assessed
			4.1.1	Taught, Practiced, Assessed
			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
			4.3.3	Taught, Practiced, Assessed
			4.3.6	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
			5.3.1	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			5.3.2	Taught, Practiced, Assessed
			5.3.3	Taught, Practiced, Assessed
			5.3.4	Taught, Practiced, Assessed
			5.3.9	Taught, Practiced, Assessed
			6.1.2	Taught, Practiced, Assessed
			6.2.1	Taught, Practiced, Assessed
			6.2.2	Taught, Practiced, Assessed
			6.2.3	Taught, Practiced, Assessed
			6.2.4	Taught, Practiced, Assessed
			6.2.5	Taught, Practiced, Assessed
			6.3.1	Taught, Practiced, Assessed
			6.3.3	Taught, Practiced, Assessed
			7.4.1	Taught, Practiced, Assessed
			7.4.2	Taught, Practiced, Assessed
			7.4.3	Taught, Practiced, Assessed
			8.1.1	Taught, Practiced, Assessed
			8.1.2	Taught, Practiced, Assessed
			8.1.3	Taught, Practiced, Assessed
			8.2.1	Taught, Practiced, Assessed
			8.2.2	Taught, Practiced, Assessed
			8.4.3	Taught, Practiced, Assessed
			8.4.4	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			9.1.1	Taught, Practiced, Assessed
			9.2.1	Taught, Practiced, Assessed
			9.3.2	Taught, Practiced, Assessed
			9.4.1	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

You are required to wear appropriate personal protective equipment (PPE) during the placement, including covered, non-slip shoes and long hair should be tied back. Disposable gloves and other protective equipment laboratory (e.g. coat/gown and safety glasses) will be provided by the laboratory when required.
Students are responsible for the cost of travel and accommodation for the duration of placement and must be willing to meet vaccination requirements.

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

This course will be graded as Pass in a Limited Grade Course (PU) or Fail in a Limited Grade Course (UF) as per clause 5.1.1.3 and 5.1.1.4 of the Grades and Grade Point Average (GPA) - Academic Policy.

In a course eligible to use Limited Grades, all assessment items in that course are marked on a Pass/Fail basis and all assessment tasks are required to be passed for a student to successfully complete the course. Supplementary assessment is not available in courses using Limited Grades.

10.3. Assessment: Submission penalties

You must contact your Course Coordinator and provide the required documentation if you require an extension or alternate assessment.

Refer to the Assessment: Courses and Coursework Programs – Procedures.

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