MEDI8203

Critical Care, Patient Safety and Quality, and Research

Medicine and Health Sciences MDB, In person-scheduled-weekday, North Ryde 2022

Medicine, Health and Human Sciences Faculty level units

Contents

General Information

Unit convenor and teaching staff
Convenor
Lydia Lozzi
lydia.lozzi@mq.edu.au

Convenor
Christopher Dalton
christopher.dalton@mq.edu.au

John Turchini
john.turchini@mq.edu.au

Credit points
10

Prerequisites
(MEDI8200 or MEDI920) and (MEDI8201 or MEDI921) and (MEDI8202 or MEDI922)

Corequisites

Co-badged status

Unit description
This 8 week unit provides you with focused learning on the patient safety and quality aspects of health systems, framed within the clinical context of critical care and anaesthetics. You will explore evaluation of system-wide safety interventions and high-quality care; medical error; open disclosure and incident management; digital technology in healthcare, and the role of systems, people and services in the development and delivery of resilient healthcare. The unit incorporates an experiential learning component contextually focused on patient-centred health care delivered in the clinical disciplines of critical care and anaesthetics. The unit includes weekly lectures/seminars, case based learning sessions, clinical bedside tutorials, clinical simulation sessions, as well as clinical placements to ensure you are prepared for Stage 2 of the Macquarie MD. Your learning is integrated with advanced learning about research methodologies to prepare you for your Research Project which you will complete in Stage 2. You are expected to use these learning opportunities to demonstrate significant progress toward the development of the 4 Macquarie MD Graduate Capabilities: Scientist and Scholar, Clinical Practitioner, Engaged Global Citizen and Professional, and the Entrustable Professional Activities, at a standard appropriate to end of Stage 1 of the Macquarie MD.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Apply knowledge of relevant medical sciences, clinical presentations, scientific principles and mechanisms of disease to explain a variety of common or clinically-significant disease states, as well as how drugs and other treatments are used to manage or prevent disease in various population sub-groups (Capability 1: Scientist and Scholar)

ULO2: Identify questions and learning needs arising from clinical cases, and work individually or as part of a group to create appropriate responses to clinical scenarios, relevant to critical care, by evaluating evidence from a range of sources, including medical scientific literature (Capability 1: Scientist and Scholar)

ULO3: Construct appropriate research questions and critique methodologies that might be applied to address research questions (Capability 1: Scientist and Scholar)

ULO4: Apply basic research methodology and information search strategies to identify evidence to answer relevant clinical research questions (Capability 1: Scientist and Scholar)

ULO5: Perform clinical interviews and examinations efficiently with patients presenting with health conditions covered in Stage 1; and employ sound clinical reasoning skills in deriving diagnoses and management plans that encompass the multiple aspects of the given health issue (Capability 2: Clinical Practitioner)

ULO6: Evaluate system-wide safety interventions and high-quality care, including evaluation of the importance of patient safety and quality, the measurement and assessment of patient safety and quality, and the role of technology, systems, people and services (Capability 3: Engaged Global Citizen)

ULO7: Discuss factors affecting and promoting patient safety and quality in private and public healthcare settings, including medical error, open disclosure and incident management, use of technology in healthcare, and patient management and transference (Capability 3: Engaged Global Citizen)

ULO8: Recognise patient safety measures and the impact adverse events have on health service delivery and patient outcomes (Capability 4: Professional)

ULO9: Use feedback from teachers, clinicians, peers and patients, to inform self-

evaluation and critical reflection (Capability 4: Professional)

General Assessment Information

Detailed information regarding the assessment of the Macquarie MD and unit-specific assessment is available on the MQMDAssess Macquarie MD Assessment 2021 Intake iLearn site. Grading in this unit two types of grading will be used and a supervision recommendation will be given where a clinical assessment relates to a Stage 1 Entrustable Professional Activity (EPA). The written examination will be graded numerically with a standardised mark out of 100, while the OSCE will be coarse graded. Coarse grades (P+, P, P-, F) will be assigned to the focused and generic MD Capability Aspects as well as overall task performance. The numeric marks for the examinations and overall coarse grade for the assessment task, weighted according to their contribution, will be used to calculate the overall Unit aggregate. Unit outcomes based on the Unit aggregate will be reported to the University using the standard Macquarie grades (High Distinction, Distinction, Credit, Pass, Fail). As most assessment tasks in the program are coarse graded, a single standardised numerical grade (SNG) equivalent will be reported for each University grade. Both the numeric equivalents for the coarse grades used in the calculation of the unit aggregate and the conversion of the aggregate to a single SNG are available on the Doctor of Medicine Community iLearn site. All final grades in the Macquarie MD are reviewed by the MD Course Board and Faculty Assessment Committee and ratified by the Faculty of Medicine, Health and Human Sciences Faculty Board. Therefore, they are not the sole responsibility of the Unit Convenor. To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes, attempt all assessment tasks, and meet any ungraded requirements which include professionalism, and achieve a unit aggregate of 50% or better.

Extensions for Assessment tasks Applications for assessment task extensions must be submitted via https://ask.mq.edu.au/. For further details please refer to the Special Consideration Policy avaialble at https://students.mq.edu.au/study/assessment-exams/special-consideration Professional Expectations Professionalism is a key capability embedded in the Macquarie MD. Professional Behaviour Notifications (PBN) which can be a breach (PBNB) or a commendation (PBNC) may be awarded. PBNs will be recorded in the student's portfolio. As part of developing professionalism, Macquarie MD students are expected to attend all small group interactive sessions including clinical, practical, laboratory and team-based learning activities. If attendance is deemed to be of concern, the student will be referred to the Faculty for remediation, subsequent monitoring, and recording in the portfolio. Similarly, as part of developing professionalism, Macquarie MD students are expected to submit all work by the due date. Late submission without prior approved extension will result in a professional behaviour notification-breach (PBNB) in the portfolio.

Assessment Tasks

Name	Weighting	Hurdle	Due
Research Project Plan	20%	Yes	Week 4

Name	Weighting	Hurdle	Due
Clinical Quiz	20%	No	Week 5
Bedside tutor report and logbook	0%	No	Week 5
Objective Structured Clinical Examination (OSCE)	60%	Yes	Week 7

Research Project Plan

Assessment Type [1]: Report
Indicative Time on Task [2]: 24 hours
Due: **Week 4**
Weighting: **20%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

Submit a draft research proposal that includes the research question (s), aim (s) and objective (s) for the project to be completed in Stage 2. Overall performance and capability aspects will be assessed and recorded in your Macquarie Assessment Portfolio.

On successful completion you will be able to:
- Construct appropriate research questions and critique methodologies that might be applied to address research questions (Capability 1: Scientist and Scholar)
- Apply basic research methodology and information search strategies to identify evidence to answer relevant clinical research questions (Capability 1: Scientist and Scholar)
- Evaluate system-wide safety interventions and high-quality care, including evaluation of the importance of patient safety and quality, the measurement and assessment of patient safety and quality, and the role of technology, systems, people and services (Capability 3: Engaged Global Citizen)
- Discuss factors affecting and promoting patient safety and quality in private and public healthcare settings, including medical error, open disclosure and incident management, use of technology in healthcare, and patient management and transference (Capability 3: Engaged Global Citizen)
- Recognise patient safety measures and the impact adverse events have on health service delivery and patient outcomes (Capability 4: Professional)
- Use feedback from teachers, clinicians, peers and patients, to inform self-evaluation and critical reflection (Capability 4: Professional)

Clinical Quiz

Assessment Type [1]: Examination

Indicative Time on Task [2]: 12 hours
Due: **Week 5**
Weighting: **20%**

The Clinical Quiz is a written examination consisting of mainly multiple choice and some short answer questions which will be mapped to capability aspects. Overall and capability aspects performance will be recorded in your Macquarie Assessment Portfolio.

On successful completion you will be able to:
- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles and mechanisms of disease to explain a variety of common or clinically-significant disease states, as well as how drugs and other treatments are used to manage or prevent disease in various population sub-groups (Capability 1: Scientist and Scholar)
- Identify questions and learning needs arising from clinical cases, and work individually or as part of a group to create appropriate responses to clinical scenarios, relevant to critical care, by evaluating evidence from a range of sources, including medical scientific literature (Capability 1: Scientist and Scholar)
- Evaluate system-wide safety interventions and high-quality care, including evaluation of the importance of patient safety and quality, the measurement and assessment of patient safety and quality, and the role of technology, systems, people and services (Capability 3: Engaged Global Citizen)
- Discuss factors affecting and promoting patient safety and quality in private and public healthcare settings, including medical error, open disclosure and incident management, use of technology in healthcare, and patient management and transference (Capability 3: Engaged Global Citizen)
- Recognise patient safety measures and the impact adverse events have on health service delivery and patient outcomes (Capability 4: Professional)

Bedside tutor report and logbook

Assessment Type [1]: Clinical performance evaluation
Indicative Time on Task [2]: 4 hours
Due: **Week 5**
Weighting: **0%**

The bedside tutor will provide a supervision rating on the Stage 1 Entrustable Professional Activities and review your logbook and provide an assessment of capability aspect. The results which will be recorded in your Macquarie Assessment Portfolio.

On successful completion you will be able to:
- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles

and mechanisms of disease to explain a variety of common or clinically-significant disease states, as well as how drugs and other treatments are used to manage or prevent disease in various population sub-groups (Capability 1: Scientist and Scholar)

- Identify questions and learning needs arising from clinical cases, and work individually or as part of a group to create appropriate responses to clinical scenarios, relevant to critical care, by evaluating evidence from a range of sources, including medical scientific literature (Capability 1: Scientist and Scholar)

- Evaluate system-wide safety interventions and high-quality care, including evaluation of the importance of patient safety and quality, the measurement and assessment of patient safety and quality, and the role of technology, systems, people and services (Capability 3: Engaged Global Citizen)

- Discuss factors affecting and promoting patient safety and quality in private and public healthcare settings, including medical error, open disclosure and incident management, use of technology in healthcare, and patient management and transference (Capability 3: Engaged Global Citizen)

- Recognise patient safety measures and the impact adverse events have on health service delivery and patient outcomes (Capability 4: Professional)

- Use feedback from teachers, clinicians, peers and patients, to inform self-evaluation and critical reflection (Capability 4: Professional)

Objective Structured Clinical Examination (OSCE)

Assessment Type [1]: Clinical performance evaluation
Indicative Time on Task [2]: 35 hours
Due: **Week 7**
Weighting: **60%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

The OSCE will have numerous stations and cover all of Stage 1 content. For each station, overall performance, capability aspects and Stage 1 Entrustable Professional Activities will be assessed and recorded in your Macquarie Assessment Portfolio.

On successful completion you will be able to:

- Apply knowledge of relevant medical sciences, clinical presentations, scientific principles and mechanisms of disease to explain a variety of common or clinically-significant disease states, as well as how drugs and other treatments are used to manage or prevent disease in various population sub-groups (Capability 1: Scientist and Scholar)

- Identify questions and learning needs arising from clinical cases, and work individually or

as part of a group to create appropriate responses to clinical scenarios, relevant to critical care, by evaluating evidence from a range of sources, including medical scientific literature (Capability 1: Scientist and Scholar)

- Perform clinical interviews and examinations efficiently with patients presenting with health conditions covered in Stage 1; and employ sound clinical reasoning skills in deriving diagnoses and management plans that encompass the multiple aspects of the given health issue (Capability 2: Clinical Practitioner)

- Evaluate system-wide safety interventions and high-quality care, including evaluation of the importance of patient safety and quality, the measurement and assessment of patient safety and quality, and the role of technology, systems, people and services (Capability 3: Engaged Global Citizen)

- Discuss factors affecting and promoting patient safety and quality in private and public healthcare settings, including medical error, open disclosure and incident management, use of technology in healthcare, and patient management and transference (Capability 3: Engaged Global Citizen)

- Recognise patient safety measures and the impact adverse events have on health service delivery and patient outcomes (Capability 4: Professional)

- Use feedback from teachers, clinicians, peers and patients, to inform self-evaluation and critical reflection (Capability 4: Professional)

---

[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

The course is delivered by a variety of methods that include:

Bedside tutorials

Case based tutorials

Unit specific learning sessions

Group workshops

Self-directed online learning resources

Clinical placements

Group lectures

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing and maths support, academic skills development and wellbeing consultations.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.