



STAT8601

Epidemiology

Session 1, Fully online/virtual 2020

Department of Mathematics and Statistics

Contents

| | |
|--------------------------------|---|
| <u>General Information</u> | 2 |
| <u>Learning Outcomes</u> | 2 |
| <u>Assessment Tasks</u> | 3 |
| <u>Delivery and Resources</u> | 3 |
| <u>Policies and Procedures</u> | 3 |

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General Information

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| Unit convenor and teaching staff |
| Credit points 10 |
| Prerequisites Admission to MBioStat or GradDipBioStat or GradCertBioStat or MActPrac |
| Corequisites |
| Co-badged status |
| Unit description Epidemiology involves a cycle of asking questions about the health and disease status of individuals and populations, proposing methods to investigate problems identified, making suggestions as to their causes and then evaluating solutions designed to address the situation. The emphasis in this unit is on the application of epidemiology to the health of populations or communities. This unit covers historical developments in epidemiology; sources of data on mortality and morbidity; disease rates and standardisation; prevalence and incidence; life expectancy; linking exposure and disease (eg. relative risk, attributable risk); main types of study designs - case series, ecological studies, cross-sectional surveys, case-control studies, cohort or follow-up studies, randomised controlled trials; sources of error (chance, bias, confounding); association and causality; evaluating published papers; epidemics and epidemic investigation; surveillance; prevention; screening. Because of the multi-institutional nature of the BCA units, there is an early cut-off for enrolment in this unit, which is typically one week before the start of the session. Please contact the program coordinator for details. |

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: Recognise and explain the role, strengths and challenges of the epidemiologic approach in contributing to our understanding of health and illness

ULO2: Calculate and interpret measures of disease frequency, and measures of association between an exposure and an outcome

ULO3: Identify and compare the major study designs within observational and interventional epidemiology

ULO4: Identify and differentiate between major sources of bias, confounding, effect modifiers and mediators, and predict their potential effects on measures of association

ULO5: Assess whether observed associations are likely to be causal or non-causal

ULO6: Critically appraise published epidemiological studies using a logical framework to ascertain their internal and external validity

ULO7: Apply epidemiological concepts as they relate to specialised fields of epidemiology, including infectious disease epidemiology, disease prevention and screening

Assessment Tasks

Coronavirus (COVID-19) Update

Assessment details are no longer provided here as a result of changes due to the Coronavirus (COVID-19) pandemic.

Students should consult [iLearn](#) for revised unit information.

[Find out more about the Coronavirus \(COVID-19\) and potential impacts on staff and students](#)

Delivery and Resources

Coronavirus (COVID-19) Update

Any references to on-campus delivery below may no longer be relevant due to COVID-19.

Please check here for updated delivery information: https://ask.mq.edu.au/account/pub/display/unit_status

TBC

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>). 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](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#) (**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)

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

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central](http://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<http://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/study/getting-started/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

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- [Getting help with your assignment](#)
- [Workshops](#)
- [StudyWise](#)
- [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

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

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.