

Course Title: **Advanced Epidemiology**

Course Code: **EPMY802**

Descriptor Start Date: **01/01/2026**

POINTS: **15.00**

LEVEL: **8**

PREREQUISITE/S: **EPMY801**

COREQUISITE/S:

RESTRICTION/S: **PUBH809**

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

Applies advanced epidemiological and biostatistical concepts to examine and analyse the distribution of health and disease in populations at multiple scales. Considers and critiques the role of epidemiology in measuring health and the burden of disease within populations to inform health policy, programmes and research.

LEARNING OUTCOMES

1. Demonstrate understanding of advanced epidemiological and biostatistical concepts and terminology.
2. Analyse and critique how epidemiological and biostatistical concepts and analytical methods are used in health research, policy and programmes.
3. Critically analyse the relationship between the global burden of disease, injuries and their underlying risk factors using these concepts and terminology.
4. Present work at an appropriate academic standard.

CONTENT

Application of advanced epidemiological terms (YLLs, DALYs, YLDs) used to estimate the burden of communicable, non-communicable diseases and injuries

Role of data visualization tools for providing rationale for research and evidence-based decision making

Scope of epidemiology and its different branches.

Design features of experimental and observational studies used in population epidemiology.

Advanced biostatistical modelling concepts, including regression models.

Disclaimer: Course descriptors may be amended between teaching periods/semesters

LEARNING & TEACHING STRATEGIES

Blended learning and teaching strategies will be used to develop global health analytical knowledge. Asynchronous and synchronous online delivery modes as well as interactive discussions and activities will be a feature of this course (if online only) otherwise a range of in-class lectures, tutorials, group exercises and specialist guest lecturers, quizzes, and short presentations.

ASSESSMENT PLAN

Assessment Event	Learning Outcomes
Presentation	LO1, LO2, LO4
Written assignment 2,500 words	LO1, LO3, LO4

Grade Map

MAP1

A+ A A- Pass with Distinction

B+ B B- Pass with Merit

C+ C C- Pass

D Fail

Overall requirement/s to pass the course:

Students must pass all learning outcomes at least once to achieve a passing grade in the course.

LEARNING RESOURCES

For further information, contact: Te Ara Hauora A Putaiao - Faculty of Health & Environmental Science

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Principal Programme: AK3805, Master of Public Health

Related Programme/s: AK3662 Bachelor of Health Science (Honours) (BHSc(Hons))
AK3930 Master of Disaster Risk Management and Development (MDRMD)
AK3733 Master of Health Practice (MHPrac)
AK3485 Master of Health Science (MHSc)
AK3806 Postgraduate Diploma in Public Health (PgDipPH)
AK3487 Postgraduate Diploma in Health Science (PgDipHSc)
AK1015 Postgraduate Diploma in Disaster Risk Management and Development (PgDipDRMD)

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