PUBH 6004 APPLIED EPIDEMIOLOGY RESEARCH DESIGN

Credit Points 10

Coordinator Sam Hogan (https://directory.westernsydney.edu.au/search/name/Sam Hogan/)

Description This subject is designed to extend students' practical application of different epidemiological study designs to give them a practical understanding of how epidemiological principles and practices are used in real world settings. Students should have basic knowledge and skills in epidemiology to be successful in this subject. Students will have the opportunity to acquire and apply the practical knowledge and skills needed to undertake epidemiological research to investigate contemporary local and global health issues.

School Medicine

Discipline Epidemiology

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Postgraduate Coursework Level 6 subject

Assumed Knowledge

To be successful in this subject, students should have prior basic knowledge of key content delivered in PUBH7015 Introduction to Clinical Epidemiology or PUBH7016 Introduction to Epidemiology.

Learning Outcomes

1. Compare and contrast conceptual approaches to the conduct, design and analysis of epidemiological studies and research
2. Analyse important methodological and practical issues involved in designing and conducting case-control studies, cohort studies and cross-sectional studies
3. Explore the design aspects of ecological, spatial and genetic epidemiological studies
4. Examine the impact of chance and bias on study results and how this can be reduced through study design
5. Apply key reporting requirements of epidemiological studies
6. Reflect on personal and professional needs to enhance evidence-based practice in epidemiology

Subject Content

1. Selecting an epidemiological study design to investigate contemporary local and global health challenges
2. Working with stakeholders to design epidemiological studies
3. Ethical considerations in the design of epidemiological studies
4. Sampling approaches for epidemiological studies
5. Descriptive epidemiological study designs
6. Prospective and retrospective cohort study designs
7. Case control study designs
8. Ecological study designs
9. Spatial epidemiological study designs to describe geographic variation in disease
10. Genetic epidemiology approaches
11. Reporting epidemiological studies

Special Requirements

Essential equipment

Laptop / device with stable internet connection.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Portfolio	4 x journal entries from students cataloguing the processes behind the viva voce	20	N	Individual	N
Participation	6 x participation in online discussion boards (minimum 200 words each discussion board	30	N	Individual	N
Viva Voce	15 minute individual presentation	50	N	Individual	N

Prescribed Texts

- Applied Epidemiology: Theory to Practice. Edited by Brownson, R.C. and Petitti, D.B. By: Ross C. Brownson (Editor), Diana B. Petitti (Editor). 20026 Oxford University Press.

Teaching Periods

Spring (2025)
Parramatta - Victoria Rd
Hybrid
Subject Contact Sam Hogan (https://directory.westernsydney.edu.au/search/name/Sam Hogan/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=PUBH6004_25-SPR_PS_3#subjects)