

# Unit Outline (Higher Education)

**Institute / School:** Institute of Health and Wellbeing

**Unit Title:** Epidemiology

**Unit ID:** HEAPH6002

**Credit Points:** 15.00

**Prerequisite(s):** Nil

**Co-requisite(s):** Nil

**Exclusion(s):** Nil

**ASCED:** 061311

**Description of the Unit:**

This unit will provide the basic concepts of Epidemiology, which is one of the key disciplines of Public Health. Students will be able to understand the association between risk factors and disease outcome through utilizing different epidemiological study designs and analyses. They will also be able to understand the concepts of primary and secondary prevention of diseases, evaluation of outcomes, disease surveillance, outbreak investigations, comparisons of interventions and impact on relevant public health policies. Findings from epidemiological studies can direct individuals and community people to modify risk factors for a disease on one hand, and inform policy makers to adopt policy and practice changes on the other hand. In summary, this unit will prepare the students to understand how to use Epidemiology to respond to public health issues at local and international settings.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

**Work Experience:**

No work experience

**Placement Component:** No

**Supplementary Assessment:** Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment.

**Course Level:**

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Introductory					✓	
Intermediate						
Advanced						

**Learning Outcomes:****Knowledge:**

- K1.** Appraise the epidemiologic approach to disease and intervention
- K2.** Describe a public health problem in terms of time, place and person
- K3.** Comprehend ethical issues underlying epidemiological research

**Skills:**

- S1.** Identify appropriate epidemiological study design to answer a research question
- S2.** Calculate basic epidemiological measures
- S3.** Critically appraise epidemiological studies

**Application of knowledge and skills:**

- A1.** Apply principles of epidemiology for identifying causes of diseases
- A2.** Apply epidemiology for evaluation of public health programs and impact on public health policies
- A3.** Evaluate biasness involved in epidemiological studies

**Unit Content:**

Introduction to Epidemiology. Disease concepts in Epidemiology. Descriptive studies. Experimental studies. Observational studies. Bias in epidemiological studies. Sampling, data collection and analyses. Ethical issues in epidemiology. Epidemiology for evaluation of health services. Epidemiology for evaluation of screening programs. Epidemiology and public health policies.

**FEDTASKS**

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**tttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Co-operative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly assessed in each Course.*

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 1 Interpersonal	Students at this level will demonstrate an advanced ability in a range of contexts to effectively communicate, interact and work with others both individually and in groups. Students will be required to display high level skills in-person and/or online in: <ul style="list-style-type: none"> <li>Using and demonstrating a high level of verbal and non-verbal communication</li> <li>Demonstrating a mastery of listening for meaning and influencing via active listening</li> <li>Demonstrating and showing empathy for others</li> <li>High order skills in negotiating and conflict resolution skills</li> <li>Demonstrating mastery of working respectfully in cross-cultural and diverse teams.</li> </ul>	Not applicable	Not applicable
FEDTASK 2 Leadership	Students at this level will demonstrate a mastery in professional skills and behaviours in leading others. <ul style="list-style-type: none"> <li>Creating and sustaining a collegial environment</li> <li>Demonstrating a high level of self-awareness and the ability to self-reflect and justify decisions</li> <li>Inspiring and initiating opportunities to lead others</li> <li>Making informed professional decisions</li> <li>Demonstrating initiative in new professional situations.</li> </ul>	Not applicable	Not applicable
FEDTASK 3 Critical Thinking and Creativity	Students at this level will demonstrate high level skills in working in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in: <ul style="list-style-type: none"> <li>Reflecting critically to generate and consider complex ideas and concepts at an abstract level</li> <li>Analysing complex and abstract ideas, concepts and information</li> <li>Communicate alternative perspectives to justify complex ideas</li> <li>Demonstrate a mastery of challenging conventional thinking to clarify complex concepts</li> <li>Forming creative solutions in problem solving to new situations for further learning.</li> </ul>	Not applicable	Not applicable
FEDTASK 4 Digital Literacy	Students at this level will demonstrate the ability to work competently across a wide range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in: <ul style="list-style-type: none"> <li>Mastering, exploring, evaluating, managing, curating, organising and sharing digital information professionally</li> <li>Collating, managing complex data, accessing and using digital data securely</li> <li>Receiving and responding professionally to messages in a range of professional digital media</li> <li>Contributing competently and professionally to digital teams and working groups</li> <li>Participating at a high level in digital learning opportunities.</li> </ul>	Not applicable	Not applicable
FEDTASK 5 sustainable and Ethical Mindset	Students at this level will demonstrate a mastery of considering and assessing the consequences and impact of ideas and actions in enacting professional ethical and sustainable decisions. Students will be required to display skills in: <ul style="list-style-type: none"> <li>Demonstrate informed judgment making that considers the impact of devising complex solutions in ambiguous global economic environmental and societal contexts</li> <li>Professionally committing to the promulgation of social responsibility</li> <li>Demonstrate the ability to evaluate ethical, socially responsible and/or sustainable challenges and generating and articulating responses</li> <li>Communicating lifelong, life-wide and life-deep learning to be open to the diverse professional others</li> <li>Generating, leading and implementing required actions to foster sustainability in their professional and personal life</li> </ul>	Not applicable	Not applicable

### Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K3, S1, A1, A3	Concept note on an epidemiological study design	Research concept note	10-30%
K1, K2, K3, S1, S2, S3, A1, A3	Critical appraisal of selected epidemiological study	Critical Analysis Essay	40-60%
K1, K2, K3, S1, S2, S3, A1, A2, A3	Structured quiz	Online quiz	20-40%

**Adopted Reference Style:**

APA ( )

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)