

MASTER OF EPIDEMIOLOGY (4738)

Approved Abbreviation: MEpidemiology
Western Sydney University Program Code: 4738
AQF Level: 9

CRICOS Code: 088189K

This program applies to students who commenced in 2020 or later.

Handbook Summary 2020 - 2022

The Master of Epidemiology program is designed for graduates interested in a career in health research, including clinicians (medical, nursing and allied health) and practitioners from health-related fields (public health, environmental health, communicable disease control). It provides an advanced understanding of epidemiological concepts and methods and their application in clinical, public health and health policy settings. A variety of electives allow acquisition of specialist skills and knowledge in areas including disease surveillance, research protocol design and statistical modelling. A capstone subject involving design and conduct of an epidemiological study, which may be workplace-based, allows students to integrate their knowledge and experiences from the whole program.

Director of Academic Program - Dr Kate McBride

Handbook Summary 2023

The Master of Epidemiology Program is designed for graduates interested in a career in health research, including clinicians (medical, nursing and allied health) and practitioners from health-related fields (public health, environmental health, communicable disease control, global health, data science). It provides an advanced understanding of epidemiological concepts and methods and their application in clinical, population health and health policy settings. A variety of electives allow acquisition of specialist skills and knowledge in areas including disease surveillance, population health research, big data for and statistical modelling, climate change, and international development. A capstone Subject involving the design and conduct of an epidemiological study, which may be workplace-based or involve fieldwork, allows students to integrate their knowledge and experiences from the whole program.

Director of Academic Program - Dr Kate McBride

Early Exits

Students may exit this program on completion of 40 credit points with a 4740 Graduate Certificate in Epidemiology (<https://hbook.westernsydney.edu.au/programs/graduate-certificate-epidemiology/>) or on completion of 80 credit points with a 4739 Graduate Diploma in Epidemiology (<https://hbook.westernsydney.edu.au/programs/graduate-diploma-epidemiology/>)

Study Mode

Two years full-time or four years part-time. A one and a half years full time program is also available, depending upon entry qualifications (see Pathways listed under Program Structure below).

Program Advice

Professor Andrew Page (<https://directory.westernsydney.edu.au/search/email/medicine@westernsydney.edu.au>)

Prospective students should visit the following websites for general enquiries about this program.

Enquire about this program (<https://enquiry.westernsydney.edu.au/courseenquiry/>) | Local Admission (<https://www.westernsydney.edu.au/future/>) | International Admission (<https://www.westernsydney.edu.au/international/home/apply/admissions/>) |

Location

| Campus | Attendance | Mode | Advice |
|-----------------------------------|------------|----------|-----------|
| Online | Full Time | Online | See above |
| Online | Part Time | Online | See above |
| Parramatta Campus - Victoria Road | Full Time | Internal | See above |
| Parramatta Campus - Victoria Road | Part Time | Internal | See above |

Inherent Requirements

There are inherent requirements for this program that you must meet in order to complete your program and graduate. Make sure you read and understand the requirements for this program online.

Inherent requirements (https://www.westernsydney.edu.au/ir/inherent_requirements/inherent_requirements_for_epidemiology/)

Work Integrated Learning

Western Sydney University seeks to enhance student learning experiences by enabling students to engage in the culture, expectations and practices of their profession or discipline. This program includes a placement or other community-based unpaid practical experience.

There is a mandatory work component required for completion of this program. Please contact the Program Advisor listed above for information.

International students should also refer to the link below for more information and a link to the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS).

Work Integrated Learning (WIL) for international students (https://www.westernsydney.edu.au/currentstudents/current_students/services_and_facilities/international_student_support/working_in_australia/work_integrated_learning/)

Students may elect to complete an applied project subject and may engage their own, or some other workplace, to conduct a research project. This may involve fieldwork as part of project data collection, use of secondary data, or stakeholder engagement and would be negotiated by the student.

The provisions of an applied project subject will require that students arrange a WSU Primary Supervisor and a non-WSU Co-supervisor (associated with the project setting). In instances where a research project is based within a workplace setting requiring workplace supervision, supervisors will be supported by ongoing contact with the Subject Coordinator, and the provision of supervisor guidelines and other information about the subject throughout its duration. Additionally any research protocol requiring ethics approval will be submitted to the WSU Human Research Ethics Committee prior to commencing an applied project.

Admission

Master of Epidemiology (160 credit points)

Applicants must have an undergraduate degree, or higher, in any discipline.

Master of Epidemiology (Advanced Standing) (120 credit points)

Applicants must have an undergraduate degree, or higher, in a health, welfare or aged care discipline.

Note: Mid-year entry is available for students already enrolled at Western Sydney University in the Master of Public Health (MPH) or Master of Health Sciences (MHSc) programs and students from other universities who meet the Admission Criteria and can prove they have satisfactorily completed subjects equivalent to core subjects in the Master of Epidemiology.

Applicants seeking admission on the basis of work experience must support their application with a Statement of Service for all work experience listed on the application.

Statement of Service form (https://www.westernsydney.edu.au/content/dam/digital/pdf/Statement_of_Service.PDF)

Applications from Australian and New Zealand citizens and holders of permanent resident visas may be made via the Universities Admissions Centre (UAC) or directly through the Western Portal. Use the links below to apply via UAC or Western Sydney University. Applications made directly to Western Sydney do not have an application fee.

<http://www.uac.edu.au/>
<https://westernsydney.uac.edu.au/ws/>

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

<http://www.uac.edu.au/>

All other International applicants must apply directly to the University via the International Office.

International students applying to the University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

International Office (<http://www.westernsydney.edu.au/international/>)

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Admission Pathways for Master

There are three entry pathways into the program:

Entry Pathway A (80 credit points)

Applicants must have successfully completed:

- a Bachelors (Honours) degree, or higher in a health, welfare or aged care discipline (including the embedded Graduate Certificate or Graduate Diploma in Epidemiology);

OR

- a Bachelors degree, or equivalent in a health, welfare or aged care discipline; AND 2 years' full time equivalent documented relevant professional experience OR 5 years' full-time work-experience in a related field

Entry Pathway B (120 credit points)

Applicants must have successfully completed

- a Bachelors degree or equivalent in a health, welfare or aged care discipline;

OR

- a Bachelors degree in any discipline; AND 2 years' full time equivalent documented relevant professional experience OR 5 years' full-time work-experience in a related field

Entry Pathway C (160 credit points)

Applicants must have successfully completed

- a Bachelors degree, or higher, in any discipline;

OR

- An advanced diploma, or equivalent, in a related discipline AND five years full-time equivalent work experience at a managerial or professional level in roles in a health, welfare or aged care discipline

Note: Mid-year entry is available for students already enrolled at Western Sydney University in the Master of Public Health (MPH) or Master of Health Sciences (MHSc) programs and students from other universities who meet the Admission Criteria and can prove they have satisfactorily completed subjects equivalent to core subjects in the Master of Epidemiology.

Applicants seeking admission on the basis of work experience must support their application with a Statement of Service for all work experience listed on the application.

Statement of Service form (https://www.westernsydney.edu.au/content/dam/digital/pdf/Statement_of_Service.PDF)

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International Office (<http://www.westernsydney.edu.au/international/>)

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Recommended Sequence

Master of Epidemiology - 1.5 year pathway

Master of Epidemiology - Advanced Standing. One and a half year program (120 credit points)

Applicants must have an Undergraduate degree, or higher, in health, welfare or aged care discipline.

In addition to these higher qualifications, applicants with Advanced Standing must also have a demonstrated breadth of prior knowledge related to health-related policy and/or practice, including epidemiology and its research/policy applications.

| Course | Title | Credit Points |
|---|--|----------------------------|
| Year 1 | | |
| Autumn session | | |
| Core Subjects | | |
| HLTH 7008 | Introduction to Biostatistics | 10 |
| Select one of the following: | | 10 |
| PUBH 7015 | Introduction to Clinical Epidemiology | |
| PUBH 7016 | Introduction to Epidemiology | |
| Alternate subjects | | |
| Select two of the following: | | 20 |
| PUBH 7033 | The Social Determinants of Health | |
| PUBH 7005 | Controversies in Epidemiology | |
| PUBH 7006 | Data Management and Programming for Epidemiology | |
| PUBH 7008 | Environmental Epidemiology | |
| PUBH 7010 | Epidemiology of Non-Communicable Diseases | |
| HLTH 7015 | Qualitative Research Methodology in Health | |
| | | Credit Points |
| | | 40 |
| Spring session | | |
| Core Subjects | | |
| PUBH 7002 | Analytic Approaches in Epidemiology | 10 |
| PUBH 7025 | Statistical Methods in Epidemiology | 10 |
| Alternate subjects | | |
| Select two of the following: | | 20 |
| PUBH 7004 | Communicable Diseases | |
| PUBH 7030 | Health Systems Planning and Evaluation | |
| AGEN 7005 | Research Protocol Design and Practice | |
| PUBH 7028 | Surveillance and Disaster Planning | |
| | | Credit Points |
| | | 40 |
| Year 2 | | |
| Autumn session | | |
| Complete one of the following paths: | | 40 |
| HLTH 7004 | Dissertation | |
| OR | | |
| Autumn/Spring session | | |
| HLTH 7020 | Dissertation (Part Time) | |
| HLTH 7020 Dissertation (Part time) is completed over two teaching sessions, thus students will need to enrol twice in this subject. | | |
| | | Credit Points |
| | | 40 |
| | | Total Credit Points |
| | | 120 |

Notes:

No subjects are removed or waived from this program pathway. All prospective students must complete core, capstone and alternate subjects. Students who demonstrate that they qualify for Advanced Standing on the basis of a breadth of prior knowledge in a cognate area

are exempt from completing alternate subjects that represent more specialised areas of the program.

For applicants with a background in health-related policy and/or practice, including epidemiology and its research/policy applications, subjects PUBH 7012, HLTH 7001, PUBH 7010, PUBH 7008 and PUBH 7005 do not constitute core requirements for their completion of the course.

Exit Awards

Students can elect to exit the program with a Graduate Certificate (40 credit points) or Graduate Diploma in Epidemiology (80 credit points). These are offered as 6 and 12 month full-time programs respectively, or as part-time equivalent programs.

Master of Epidemiology - 2 year pathway

Master of Epidemiology - Two year program (160 credit points)

Applicants must have either

an undergraduate degree (Level 7), or higher, in a health, welfare or aged care discipline

Or

a graduate diploma or graduate certificate in a health, welfare or aged care discipline plus at least 3 years work experience in a health, welfare or aged care discipline.

| Course | Title | Credit Points |
|-------------------------------|--|----------------------|
| Year 1 | | |
| Autumn session | | |
| Core Subjects | | |
| HLTH 7008 | Introduction to Biostatistics | 10 |
| Select one of the following: | | 10 |
| PUBH 7015 | Introduction to Clinical Epidemiology | |
| PUBH 7016 | Introduction to Epidemiology | |
| Alternate subjects | | |
| Select two of the following: | | 20 |
| PUBH 7033 | The Social Determinants of Health | |
| PUBH 7006 | Data Management and Programming for Epidemiology | |
| PUBH 7010 | Epidemiology of Non-Communicable Diseases | |
| HLTH 7015 | Qualitative Research Methodology in Health | |
| | | Credit Points |
| | | 40 |
| Spring session | | |
| Core Subjects | | |
| PUBH 7002 | Analytic Approaches in Epidemiology | 10 |
| PUBH 7025 | Statistical Methods in Epidemiology | 10 |
| Alternate subjects | | |
| Select two of the following: | | 20 |
| PUBH 7004 | Communicable Diseases | |
| PUBH 7030 | Health Systems Planning and Evaluation | |
| AGEN 7005 | Research Protocol Design and Practice | |
| PUBH 7028 | Surveillance and Disaster Planning | |
| | | Credit Points |
| | | 40 |
| Year 2 | | |
| Autumn session | | |
| Select four of the following: | | 40 |

| | | |
|---|--|------------|
| PUBH 7033 | The Social Determinants of Health | |
| PUBH 7005 | Controversies in Epidemiology | |
| PUBH 7006 | Data Management and Programming for Epidemiology | |
| PUBH 7008 | Environmental Epidemiology | |
| PUBH 7010 | Epidemiology of Non-Communicable Diseases | |
| AGEN 7005 | Research Protocol Design and Practice | |
| Credit Points | | 40 |
| Spring session | | |
| Complete one of the following paths: | | 40 |
| HLTH 7004 | Dissertation | |
| OR | | |
| Spring/Autumn session | | |
| HLTH 7020 | Dissertation (Part Time) | |
| HLTH 7020 Dissertation (Part time) is completed over two teaching sessions, thus students will need to enrol twice in this subject. | | |
| Credit Points | | 40 |
| Total Credit Points | | 160 |

Exit Awards

Students can elect to exit the program with a Graduate Certificate (40 credit points) or Graduate Diploma in Epidemiology (80 credit points). These are offered as 6 and 12 month full-time programs respectively, or as part-time equivalent programs.

Recommended Sequence**Master of Epidemiology - 160cp Pathway - Start Year**

Successful completion of this pathway requires the completion of 80 credit points of core subjects, and 80 credit points of alternate subjects.

Alternate subjects can be used to complete a focus.

Students may exit with a Graduate Diploma in Epidemiology upon completion of at least 80 credit points specified in the graduate diploma program structure.

Students may exit with a Graduate Certificate in Epidemiology upon completion of at least 40 credit points specified in the graduate certificate program structure.

| Course | Title | Credit Points |
|-------------------------------|---------------------------------------|---------------|
| Year 1 | | |
| Autumn session | | |
| HLTH 7008 | Introduction to Biostatistics | 10 |
| PUBH 7015 | Introduction to Clinical Epidemiology | 10 |
| Choose two alternate subjects | | 20 |
| Credit Points | | 40 |
| Spring session | | |
| PUBH 7002 | Analytic Approaches in Epidemiology | 10 |
| PUBH 7025 | Statistical Methods in Epidemiology | 10 |
| PUBH 6004 | Applied Epidemiology Research Design | 10 |
| Choose one alternate subject | | 10 |
| Credit Points | | 40 |

Year 2**Autumn session**

| | | |
|--------------------------------|--|-----------|
| Choose four alternate subjects | | 40 |
| Credit Points | | 40 |

Spring session

| | | |
|----------------------|--|-----------|
| Autumn/Spring | | 40 |
|----------------------|--|-----------|

| | | |
|-------------------------------|-------------------------------|------------|
| PUBH 6005 | Applied Epidemiology Project | |
| OR | | |
| MEDI 7066 | Medical Research Project (PG) | |
| Choose two alternate subjects | | |
| Credit Points | | 40 |
| Total Credit Points | | 160 |

Master of Epidemiology - 160cp Pathway - Mid-Year Intake

| Course | Title | Credit Points |
|--------|-------|---------------|
|--------|-------|---------------|

Year 1**Spring session**

| | | |
|-------------------------------|---------------------------------------|-----------|
| HLTH 7008 | Introduction to Biostatistics | 10 |
| PUBH 7015 | Introduction to Clinical Epidemiology | 10 |
| Choose two alternate subjects | | 20 |
| Credit Points | | 40 |

Autumn session

| | | |
|--------------------------------|--|-----------|
| Choose four alternate subjects | | 40 |
| Credit Points | | 40 |

Year 2**Spring session**

| | | |
|------------------------------|--------------------------------------|-----------|
| PUBH 7002 | Analytic Approaches in Epidemiology | 10 |
| PUBH 7025 | Statistical Methods in Epidemiology | 10 |
| PUBH 6004 | Applied Epidemiology Research Design | 10 |
| Choose one alternate subject | | 10 |
| Credit Points | | 40 |

Autumn session

| | | |
|----------------------|--|-----------|
| Autumn/Spring | | 40 |
|----------------------|--|-----------|

| | | |
|-------------------------------|-------------------------------|------------|
| PUBH 6005 | Applied Epidemiology Project | |
| OR | | |
| MEDI 7066 | Medical Research Project (PG) | |
| Choose two alternate subjects | | |
| Credit Points | | 40 |
| Total Credit Points | | 160 |

Master of Epidemiology - 120cp Pathway - Start Year

Successful completion of this pathway requires the completion of 80 credit points of core and 40 credit points of alternate subjects.

Students may exit with a Graduate Diploma in Epidemiology upon completion of at least 80 credit points specified in the graduate diploma program structure.

Students may exit with a Graduate Certificate in Epidemiology upon completion of at least 40 credit points specified in the graduate certificate program structure.

| Course | Title | Credit Points |
|--------|-------|---------------|
|--------|-------|---------------|

Year 1**Autumn session**

| | | |
|-----------|---------------------------------------|----|
| PUBH 7015 | Introduction to Clinical Epidemiology | 10 |
|-----------|---------------------------------------|----|

| | | |
|-------------------------------|--------------------------------------|------------|
| HLTH 7008 | Introduction to Biostatistics | 10 |
| Choose two alternate subjects | | 20 |
| Credit Points | | 40 |
| Spring session | | |
| PUBH 7002 | Analytic Approaches in Epidemiology | 10 |
| PUBH 7025 | Statistical Methods in Epidemiology | 10 |
| PUBH 6004 | Applied Epidemiology Research Design | 10 |
| Choose one alternate subject | | 10 |
| Credit Points | | 40 |
| Year 2 | | |
| Autumn session | | |
| Autumn/Spring | | 40 |
| PUBH 6005 | Applied Epidemiology Project | |
| OR | | |
| MEDI 7066 | Medical Research Project (PG) | |
| Choose two alternate subjects | | |
| Credit Points | | 40 |
| Total Credit Points | | 120 |

Master of Epidemiology - 120cp Pathway - Mid-Year Intake

Students who enrol in the mid-year intake for the 120cp Master of Epidemiology will not have the option of completing the 40cp capstone subject PUBH 6005 Applied Epidemiology Project, as core subjects, PUBH7002 and PUBH7025 are offered only in Spring semester.

| Course | Title | Credit Points |
|--------------------------------|---------------------------------------|---------------|
| Year 1 | | |
| Spring session | | |
| PUBH 7015 | Introduction to Clinical Epidemiology | 10 |
| HLTH 7008 | Introduction to Biostatistics | 10 |
| PUBH 6004 | Applied Epidemiology Research Design | 10 |
| Choose one alternate subject | | 10 |
| Credit Points | | 40 |
| Autumn session | | |
| Choose four alternate subjects | | 40 |
| Credit Points | | 40 |
| Year 2 | | |
| Spring session | | |
| PUBH 7002 | Analytic Approaches in Epidemiology | 10 |
| PUBH 7025 | Statistical Methods in Epidemiology | 10 |
| MEDI 7066 | Medical Research Project (PG) | 20 |
| Credit Points | | 40 |
| Total Credit Points | | 120 |

Master of Epidemiology - 80 credit points Pathway - Mid-Year Intake Only

Successful completion of this pathway requires the completion of 80 credit points of core and focus subjects.

| Course | Title | Credit Points |
|-----------------------|--------------------------------------|---------------|
| Year 1 | | |
| Spring session | | |
| PUBH 7002 | Analytic Approaches in Epidemiology | 10 |
| PUBH 7025 | Statistical Methods in Epidemiology | 10 |
| PUBH 6004 | Applied Epidemiology Research Design | 10 |

| | | |
|-------------------------------|-------------------------------|-----------|
| Choose one alternate subject | | 10 |
| Credit Points | | 40 |
| Autumn session | | |
| Autumn/Spring | | 40 |
| PUBH 6005 | Applied Epidemiology Project | |
| OR | | |
| MEDI 7066 | Medical Research Project (PG) | |
| Choose two alternate subjects | | |
| Credit Points | | 40 |
| Total Credit Points | | 80 |

Alternate Subject Pool - for all the above Programs

| Subject | Title | Credit Points |
|--|---|---------------|
| APPLIED TOPICS IN EPIDEMIOLOGY | | |
| PUBH 5001 | Infectious Diseases and Outbreak Response | 10 |
| PUBH 6001 | Epidemiology of Climate Change | 10 |
| PUBH 6003 | Applied Clinical Epidemiology | 10 |
| PUBH 7010 | Epidemiology of Non-Communicable Diseases | 10 |
| PUBH 7011 | Health Advancement and Health Promotion | 10 |
| PUBH 7033 | The Social Determinants of Health | 10 |
| GLOBAL HEALTH FOCUS | | |
| HUMN 7023 | Global Health, Migration and Development | 10 |
| HUMN 7024 | Humanitarian and Development Agendas and Progress | 10 |
| HUMN 7028 | Management and Evaluation of Aid Programs | 10 |
| HUMN 7031 | Political Economy of Development | 10 |
| HUMN 7032 | Public Health in Complex Emergencies (Advanced) | 10 |
| DATA SCIENCE IN POPULATION HEALTH FOCUS | | |
| COMP 7003 | Big Data | 10 |
| COMP 7006 | Data Science | 10 |
| MATH 7014 | Social Media Intelligence | 10 |
| PUBH 6002 | Systems Science and Population Health | 10 |
| PUBH 7006 | Data Management and Programming for Epidemiology | 10 |

Replaced Subjects

The subject listed below count towards completion of this program for students who passed these subjects in 2022 or earlier.

PUBH 7004 Communicable Diseases, replaced by PUBH 5001 Infectious Diseases and Outbreak Response