School of Population & Global Health

Population Health major

Your 2017 guidebook to the Bachelor of Science Population Health major
“After being indecisive about my degree, I settled on Population Health. I am glad that I chose to do this major because it has not only fueled my desire and interest for Population Health but it has allowed me opportunities and experiences that have enriched my learning and made my degree incredibly enjoyable. Doing a degree that you are passionate about really does make university a lot more fun”.

**Charlotte Schiefler**
BSc student - Population Health major

“Being part of a small major means that I get to build close relationships with my lecturers, tutors, and population health staff. These close ties have proved to be invaluable throughout my undergraduate degree as they have helped me better my understanding of my major as well as helped me to secure some incredible work experience opportunities, even before I’ve graduated! ”.

**Danny Della Vedova**
BSc student - Population Health and Conservation Biology majors
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Welcome to the Bachelor of Science Population Health major

We are very pleased to welcome you to the Population Health major, and hope that you find your studies in population health valuable and rewarding. We believe you have made an excellent choice of major. The population health major emphasises the real world application of what we are teaching and gives you a depth of knowledge about health issues. The major also has a focus on what employers want – project management, critical thinking, problem solving, team work and communication.

The aim of this booklet is to give you an overview of the Population Health major, the School of Population & Global Health (SPGH), opportunities in population health and areas of employment for graduates in population health. Our staff are here to support you throughout your studies as well as in your career progression. Please feel welcome to contact any of us.

If you would like to receive further information please do not hesitate to contact Assistant Professor Siobhan Hickling: siobhan.hickling@uwa.edu.au

What is Population Health?

Population health (also referred to as public health) plays an important role in protecting people’s health and wellbeing as well as improving the conditions and behaviours that affect the health of each and every one of us.

Population health tackles both infectious and non-infectious diseases and promotes healthier lifestyles. Population health looks at the influences on health – from social and economic circumstances to our environment – and then works to minimise health risks. From tobacco policy to immunization clinics, from healthy food choices to bike paths, population health is all around us – protecting our health by safeguarding the places where we live, work and play. The dramatic achievements of population health in the 20th century include an improved quality of life, reduction in the prevalence of risk factors such as smoking, increased life expectancy, a world-wide reduction in infant and child mortality, and a reduction or elimination of many communicable diseases.

One great aspect about a career in population health is that it is never static. It continually presents new challenges and you can be working on the cutting edge of the nation’s public health issues. Some of the career opportunities in population health include: health promotion officer; health policy advisor or consultant; epidemiologist; health researcher; health project officer or manager; health scientist; health advocate; health administrator; and, when combined with economics, health economist.
About the School of Population & Global Health

Our School
The University of Western Australia’s School of Population and Global Health is part of the Faculty of Health and Medical Sciences (FHMS) at UWA. It is located in the Clifton Street Building on UWA’s Nedlands Campus on the corner of Gordon Street and Clifton Street, Nedlands. The School has a reputation for award-winning teaching and world-class research excellence and is committed to the discovery and communication of knowledge to improve human health. The School is a member of the Sax Institute and CAPHIA (Council of Academic Public Health Institutions Australia). Staff have collaborations with researchers locally, nationally and internationally, including Spain, UK, Austria, South Africa and India.

Our mission
The Mission Statement of the School of Population and Global Health is to:

Influence policy and practice to improve the health and wellbeing of communities and people through leadership, discovery and communication.

Our Staff and Research
Our School has high-calibre staff who have national and international reputations, and who are very passionate about population health and teaching. There are over 80 academic and research staff involved in a vast array of research areas including: aged care research; ecology and health; health promotion and evaluation; health services research; environmental and occupational epidemiology; cancer epidemiology; social determinants of health; child activity and health and cardiovascular and respiratory diseases. We also have powerful research resources like the Busselton Health Study; the Raine Study; the Population Health Research Network; the WA Centre for Rural Health; and the Consumer and Community Health Research Network.

Through the wide range of research areas, networks and funding agencies, strong links have been fostered between the School and the health industry, hospital, government and non-government organisations.

Please see our website for more information: sph.uwa.edu.au
The Bachelor of Science (BSc) Population Health major

The Population Health major is a science major within the Bachelor of Science and is offered by the School of Population and Global Health in the Faculty of Health and Medical Sciences. This major was first offered in 2012. It was developed in response to an identified need within the health sector for graduates with a sound knowledge of population perspectives on health. As such, the major combines a broad base of content knowledge and the application of that knowledge to health issues.

Administration of the Population Health major

The major is coordinated by Assistant Professor Siobhan Hickling. Siobhan is located in Room G.12, Clifton Street Building, Nedlands Campus. Students are encouraged to contact Siobhan if they need any advice on their career goals, study plans or other issues.

The School of Population and Global Health is very receptive to feedback from students in the program. Please feel welcome to raise any issues, positive or negative, with Siobhan by email: siobhan.hickling@uwa.edu.au

The SPGH Administration team can be contacted on 6488 1271 or at enquiries-sph@uwa.edu.au.

Major structure

Upon completion of the Population Health major, graduates are expected to have a sound knowledge of: the principles that underpin population health; the Australian health system; prevention and management of ill-health; health promotion; health policy and health leadership.

In the first and second years of the Population Health major, you are introduced to the fundamental principles of population health and are provided with a framework for assessing and managing issues of public health importance. This framework provides the ability to assess current and emerging health issues. You are also introduced to the complexity of the structure and function of the Australian health system. Through the complementary units, you gain knowledge in Aboriginal health and communication and project planning.
In the first year of the Population Health major, we ask the questions:

- What is population health? How do we measure the scope of a health problem? Why is it important? Who is at risk?
- What are the major risk factors or determinants of a given public health problem? What historical, environmental, social, economic, political, biological and physical influences exist?
- What are the major global developments and their consequence on health? What are the global actions aimed at reducing disease and promoting health and wellbeing?

In the second year of the Population Health major, we build upon these fundamental principles. We focus on the following:

- How do we determine or measure the size of the problem and who is at risk?
- How do we determine the causes or risk factors for diseases?
- What is the potential for prevention of ill-health or improved management of ill-health?

In the third year, we consider in more depth:

- The approaches to influencing behaviour and promoting and advocating for good health through the development of health promotion programs.
- How health systems and policy are organised to support the health needs of a community.
- How to develop leadership skills for contemporary health industry issues in Australia and globally.
- How to undertake quantitative and qualitative research to investigate important health issues.

Also in third year we offer students the opportunity to undertake a practicum in health (PUBH3308) as an elective.

The core and complementary units undertaken are shown in Table 1 on page 8 and unit descriptions are provided in Appendix 1 starting on page 21. Elective units offered by the School of Population and Global Health and FHMS are shown in Table 2 on page 8. Note that not all units are available every year. Full information on these and many other units, including unit prerequisites, rules and timetables can be found at handbooks.uwa.edu.au
Table 1: Core and **Complementary** units

<table>
<thead>
<tr>
<th>Level</th>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>PUBH1101 Health &amp; Illness in Human Populations</td>
<td>PUBH1102 Health &amp; Globalisation</td>
</tr>
<tr>
<td>2</td>
<td>PUBH2204 Disease Prevention &amp; Control</td>
<td>PUBH2203 Foundations of Epidemiology &amp; Biostatistics</td>
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<td></td>
<td>AHEA2201 Aboriginal Health &amp; Wellbeing</td>
<td>PUBH2216 Communication &amp; Project Planning in Health</td>
</tr>
<tr>
<td>3</td>
<td>PUBH3307 Health Systems &amp; Policy</td>
<td>PUBH3301 Health Leadership</td>
</tr>
<tr>
<td></td>
<td>PUBH3305 Health Research Design &amp; Methods</td>
<td>PUBH3302 Health Promotion</td>
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Table 2: Elective units offered by SPGH (PUBH codes) and FHMS

<table>
<thead>
<tr>
<th>Level</th>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IMED1108 Issues in Women’s Health Across the Lifespan</td>
<td>PHAR1101 Drugs that Changed the World</td>
</tr>
<tr>
<td>2</td>
<td>IMED2200 Mental Wellbeing for Today’s World</td>
<td>PUBH2208 Food &amp; Nutrition in Population Health</td>
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<tr>
<td></td>
<td>PUBH2209 Plagues, Pox &amp; Pandemics: the History of Death &amp; Disease</td>
<td>PUBH2211 Population Health Field Trip (NS)</td>
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<tr>
<td></td>
<td>SCIE2100 Social Responsibility in Action</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IMED2208 Issues in Women’s Reproductive Health: Major Diseases &amp; Health Problems</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PUBH3308 Population Health Practicum (NS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IMED3301 Issues in Women’s Reproductive Health: Research &amp; Evidence -based Practice *</td>
<td></td>
</tr>
</tbody>
</table>

*Not available in 2017

NS: Non-standard teaching period
The graduate outcomes of the Population Health major are provided here so that students can see what they should achieve by the end of this major.

**Major-specific outcomes**
A student who has successfully completed the BSc Population Health major should be able to:

1. Discuss major health issues locally and globally.

2. Evaluate biological, cultural, social, environmental, economic, historical and political influences that determine health locally and globally.

3. Recognise the historical, social, environmental, economic and political contexts that frame public health approaches.

4. Appraise current and emerging issues in health.

5. Integrate scientific knowledge and skills to understanding health locally and globally.

6. Demonstrate knowledge of the socio-cultural context of the health of Aboriginal, Torres Strait Islander and other indigenous peoples.

7. Develop, implement, and critically review quantitative and qualitative research relevant to health.

8. Use evidence-based approaches to health issues.

9. Critically evaluate approaches to managing health at a population level.

10. Analyse population health needs and promote healthy behaviours and environments through actions with individuals, communities and society.

11. Demonstrate the ability to plan and evaluate effective strategies to promote and improve health and evaluate effective ways of delivery.

12. Describe and compare the organisation and delivery of Australian and other health systems.
13. Critically review and evaluate policies in resource allocation and health systems.

14. Discuss equity from a population health perspective.

15. Appraise cultural appropriateness of health strategies.

**Degree-specific outcomes**
A student who has successfully completed a degree including Population Health major should be able to:

1. Demonstrate an ability to work in a team and recognise the diverse contributions of team members.

2. Work and think across discipline boundaries.

3. Demonstrate ability to think and reason logically and creatively.

4. Identify and analyse problems and their solutions.

5. Think critically about issues, including being open to new ideas.

6. Illustrate mature judgement and responsibility in ethical, moral, social and practical, as well as academic matters.

7. Use effective communication skills.

8. Apply principles of life-long learning - that is, the skills required to learn, and to continue through life to learn - from a variety of sources and experiences.

Honours in Population Health

There is the opportunity to undertake honours within the School of Population and Global Health (SPGH) at the end of your degree. If you have achieved a weighted average of 70% in level 3 units in the Population Health major, you will be invited to do honours in Population Health. Honours students participate in original research by developing and undertaking supervised research project, presenting a seminar and preparing a dissertation.

There is a wide range of interesting projects available for honours research. Some of the projects we offer are shown in our Research Projects booklet at sph.uwa.edu.au/students/honours

As part of the honour program, students also undertake four coursework units: Epidemiology 1 (PUBH4403), Biostatistics 1 (PUBH4401), Honours Research Process (PUBH4402) and Research Conduct and Ethics (PAED4401).

If you would like more information about honours, please contact our honours coordinator, Dr Ian Li at ian.li@uwa.edu.au

Previous honours projects can be perused in the SPGH and Reid libraries. Examples of projects done by honours students include:

- A quality assurance audit of treatment procedures for febrile neutropenic patients at Princess Margaret Hospital.
- A spatial case-control study investigating the effect of vehicle emissions on asthma hospitalisations.
- Assessing the relationship between a general exposure questionnaire and a food frequency questionnaire regarding supplemental folate intake in and around pregnancy.
- An economic evaluation on footpath installation to increase levels of neighbourhood walking.
- Promoting neighbourhood walkability: a content analysis of new housing development marketing materials.
- An evaluation of the health impacts of fluoride in drinking water in India.
- Post-surgical changes in obesity, cardiovascular risk factors and blood glucose regulation among patients undergoing laparoscopic sleeve gastrectomy.
- Social justice and cancer control - an evaluation of distributive utilisation of cancer support services provided by the Cancer Council of Western Australia.
- Estimating the burden of disease consequential to childhood obesity in WA.
Work experience and employment in population health

Work experience in population health is a great opportunity to develop new skills, meet potential employers and see public health in action. At the School of Population and Global Health we offer students the opportunity to gain work experience as part of a voluntary program. There are many opportunities for students to work with SPGH staff on current projects to gain experience in research and administration or to work with external health agencies on some of their exciting programs.

If you are interested in work experience opportunities or would like to hear more about them, please email Sheona Kaschula: sheona.kaschula@uwa.edu.au

Population Health graduates may find employment broadly in the areas of population health planning and policy, health research, health administration, health economics or health promotion and evaluation. Figures 1 and 2 provide an overview of the paths and possibilities that can begin with a Population Health major. This major is also an excellent base degree for medicine, dentistry, social work, podiatric medicine, and other health-based professional qualification postgraduate courses.

Figure 1: Potential career pathways with population health
Figure 2: Six areas of population health career directions
Prizes and Scholarships

Prizes for Excellence in Population Health
Three prizes, each comprising a $500 book voucher and a certificate, are awarded for units completed as part of the Population Health major sequence as follows:

The School of Population and Global Health Prizes for Excellence in Public Health
A prize is awarded to the student who achieves the highest aggregate mark in Health and Illness in Human Populations (PUBH1101) and Health and Globalisation (PUBH1102).

A prize is awarded to the student who achieves the highest aggregate mark for Foundations of Epidemiology and Biostatistics (PUBH2203) and Disease Prevention and Control (PUBH2204).

The D’Arcy Holman Prize for Population Health
A prize is awarded to the student achieving the highest aggregate score for the following units:
- Health Leadership (PUBH3301); Health Promotion (PUBH3302);
- Health Systems and Policy (PUBH3307) and Health Research Design and Methods (PUBH3305).

Scholarships
Summer Research Scholarship - The Australian National University offers Summer Research scholarships for undergraduate students completing the third or fourth year of a full-time course in an Australian or New Zealand university: [anu.edu.au/study/study-options/summer-research-program](anu.edu.au/study/study-options/summer-research-program)

CEED (Co-operative Education for Enterprise Development) projects are tax free studentships which have been developed in conjunction with industry partners and are offered for either the industry practicum, or honours. Projects available and further information is available at [ceed.uwa.edu.au](ceed.uwa.edu.au)

Each year a number of awards valued at $3,000 are offered to students by The Cancer Council WA for tenure during the long Christmas vacation. Projects must broadly relate to cancer. Applicants must have successfully completed the first two years of an appropriate degree course in the disciplines relevant to cancer control (in the case of medical students, this would be at the end of their third year). Awards are for a period of 4 to 10 weeks. More information can be found at [cancerwa.asn.au/research/funding/usher](cancerwa.asn.au/research/funding/usher)

Further information on scholarships for undergraduate, vacation, honours and postgraduate scholarships is available from the University of Western Australia Scholarship Office at [scholarships.uwa.edu.au](scholarships.uwa.edu.au)
Helpful websites

A number of helpful websites are available to you:

sph.uwa.edu.au
The School of Population and Global Health homepage. From here you can get further information about our courses, research and news and events. You can also get to main links via Current Students sph.uwa.edu.au/students for access to studentConnect, CAS (Class Allocation System), LMS (Learning Management System) and Webmail.

meddent.uwa.edu.au
The Faculty of Health and Medical Sciences homepage. Here you can get more information on what is happening in your Faculty.

handbooks.uwa.edu.au
The UWA Handbook site contains comprehensive information on undergraduate and postgraduate courses and units, including unit outlines, rules and contacts. It also contains links to handbooks of past years.

science.uwa.edu.au/students/office
The Science Student Office is based at the Faculty of Science, just down from the Science Library. Undergraduate and postgraduate students can just drop in for:
• advice about courses and majors;
• assistance with unit selection;
• submitting a range of applications including special consideration, credit transfer, advanced standing and recognition of prior learning;
• information about study abroad, exchange and cross-institutional study; and submission of applications for postgraduate study.
The Faculty of Science students page has some good links too: science.uwa.edu.au/students

library.uwa.edu.au
Many libraries are situated across the campus. Library locations and general information regarding loans, photocopying etc. is available in the booklet Library Services for Undergraduate Students, distributed in Library training sessions and available from all UWA Libraries. The Library home page is essential to your studies.

studentconnect.uwa.edu.au
Student Connect is the student portal for all enrolment, fees, personal information, as well as results, examinations timetable etc. You must first activate your Pheme account (pheme.uwa.edu.au) and you can then access Student Connect using your student ID and password.
student.uwa.edu.au
Student Central can help with all the general administrative details regarding your course, including academic transcripts, enrolments and changes to units, fees, important dates, forms, campus cards and much more.

student.uwa.edu.au/course will take you directly to a range of links for general administrative details all in one place, such as for re-enrolment, exam locations, academic transcripts and important dates. Maps and contact details for key services like Student Central, Student Services, UWA Sports and the Medical Centre can be found at student.uwa.edu.au/contact.

studentservices.uwa.edu.au
Student Support Services offers students a number of services to assist students in their university life and study. These include a Careers Centre, Housing Services, Financial Aid Service, Counselling and Psychological Services (CAPS), Medical Centre and Chaplaincy.

student.uwa.edu.au/learning
Student learning provides links to UWA support for opportunities to assist and enrich your academic studies.

student.uwa.edu.au/learning/studysmarter
Study Smarter has a range of free on-campus and online services to help you develop your English language communication, research, critical analysis, numeracy and study skills. If you want to get more out of your study, Study Smarter will be able to help you. They provide assistance with assignment research and writing, maths and statistics, oral presentations and examination preparation. We encourage you to use their excellent services. Please visit the Study Smarter website to see the range of services provided.

timetable.uwa.edu.au
The academic timetable is the document that sets out the times and places of lectures, tutorials, laboratories and any other activities. It is a student’s responsibility to check this timetable. Students should consult the timetable when selecting units for enrolment to avoid unit clashes.

uwa.edu.au/askuwa
askUWA is the information gateway to your questions about enrolments, fees, examinations and graduations. Browse the numerous questions and answers in the FAQ section or submit your question and have it answered by a subject expert.
Health Student Society

Prospective students
So you’ve heard about Population Health and how great studying at UWA is….well, we’re here to make your time at UWA even better.
The Health Students’ Society (HSS) is a student-run Faculty Society (FAC-SOC) tailored to meet the social and educational needs of Population Health, Pharmacology, Pathology, Medical Sciences and Aboriginal Health and Wellbeing students. HSS holds regular events which are a great way to make friends and interact with staff. Since its inception, the enthusiasm and hard work of students has seen HSS grow and push the boundaries of achievement and opportunity. Joining HSS or becoming a HSS committee member is a fantastic way to challenge yourself, while making a positive contribution to UWA and having fun at the same time!

Current and prospective students
Here are some easy options for getting involved and benefiting from HSS:
• Visit the HSS stall on James Oval during Orientation Day (O-Day), and sign up as a member. This entitles you to discounts at all of our events and keeps you updated about HSS.
• Annual Elections for 14 positions are held at the end of semester two for first, second and third year students. For first years students there are two first year representative spots up for grabs in semester one. These positions are open to Population Health, Medical Sciences, Pharmacology, Pathology and Aboriginal Health and Wellbeing majors. It is a great way to meet new people and feel involved at University. So get on board!
No matter your experience we’d love to have you, so nominate for a position on the HSS Committee.

Contact details
Interested in more information on HSS or being a Population Health student at UWA?
• Come find us at the School of Population and Global Health website sph.uwa.edu.au/students/hss.
• You can find our Facebook group page: facebook.com/HealthStudentSocietyUWA to join and message us.
• Or you can directly email our president, Deni, at 21708461@student.uwa.edu.au if you have any questions, would like to join HSS as a member, or would like to nominate for any vacant committee position.
Study Abroad and Exchange

Did you know? UWA currently has over **130 destinations** for students to attend on Student Exchange. Each university has an international reputation in teaching and research, as well as a range of compatible teaching programs so that you can continue your studies whilst seeing the world. You can choose to study at one of more than 130 partner Universities in 21 countries for one or two semesters and receive credit towards your UWA degree at the same time! If you meet the eligibility requirements, the UWA Student Exchange programme can offer you the opportunity to experience this and a great deal more...

For further information and assistance: student.uwa.edu.au/experience/exchange

Computing facilities

Population Health major students have access to the Faculty of Health and Medical Sciences computer laboratories. The computer room on the Nedlands campus is the most popular with Population Health students. You need a Student email account and activated student card to access these laboratories.

Endnote

EndNote is referencing software that enables you to create a database of references from your readings. Your database of references can then be organised, edited and converted into a formatted bibliography in many different styles, such as Harvard, APA, or Vancouver. These references can be automatically inserted into your documents. We strongly encourage you to obtain a copy.

EndNote is free for UWA students and can be downloaded for use on a personal device such as a laptop or home computer.

The library run regular training sessions, free for UWA students. For more information or to sign up for a training session, visit the EndNote guide or feel free to ask a librarian in subject libraries.

NOTE: this is only available to UWA enrolled Students and you must use PHEME login details.
Information for new students

The University recognises that transition into university life can be challenging for new students. The website student.uwa.edu.au/new contains everything you need to know about starting your studies and life at UWA, including information on the first year support, UniSkills, UniMentor and UniAccess programmes.

**First year support** is all about getting you settled into uni life and feeling confident about your ability to succeed at university. They offer a comprehensive orientation programme that is then followed up by linking students to other services and supports that help them get connected to the UWA community. student.uwa.edu.au/new/support

**UniSkills** offer to help make the transition to university study as smooth and as enjoyable as possible. Are you a first-year student who comes from a rural school, or a school where not many people come to UWA? Are you an international student? Perhaps you are going to be receiving Youth Allowance, Austudy, or some other kind of Centrelink payment whilst attending Uni? Maybe you are just returning to Uni after not studying for a while and will have significant family responsibilities whilst studying? These are only some of the many obstacles that may act as barriers to your transition into UWA. Take a look around the uniskills site to find out about joining the programme, and plenty more useful information.

**UniMentor** is open to all commencing undergraduate students at UWA. It aims to assist your transition to university life by matching students with mentors who can answer your questions. Your mentors are students in second year or above, studying the same or a similar course to you. Visit student.uwa.edu.au/new/unimentor to join.

**UniAccess** is UWA's Disability Office and offers services for students with a disability or medical condition. Please contact this office if you would like to discuss how you can best access anything from your course materials to campus buildings and activities. Please make contact well before your course begins if you require a specialised orientation, so that sufficient time can be set aside to plan for this. Information about available support can be found at student.uwa.edu.au/life/health/uniaccess. Enquiries should be directed to one of the Disability Officers by e-mail at uniaccess@uwa.edu.au
**Student Guild Education Officers**

The Guild provides a professional and confidential counselling service that is free of charge to all students. The Guild Education Officers work from the Centre and you can make an appointment to see them at any time. The role of the Education Officers is to help you through any issues impacting on your life.

Contact the Guild if you:
- Need help with your finances;
- Are having problems with your studies;
- Feel you have been treated unfairly;
- Are experiencing personal problems; or
- Would just like to talk to someone.

**Student Guild contact details**
The University of Western Australia Student Guild
35 Stirling Highway
Crawley WA 6009
Phone: (+61 8) 6488 2295
Email hello@guild.uwa.edu.au or uwastudentguild.com/contact
uwastudentguild.edu.au

“One of the best aspects of the Population Health major is the small class sizes and the personal approach lecturers, tutors and other academic staff have to teaching within the major. This ranges from simply knowing student names (a rarity in some faculties) to being aware of a student’s academic ability, including their strengths and areas they could improve. It seems that the small class sizes and relationship between students and academic staff also foster a degree of pastoral care not found in other majors, which arguably results in better teaching and academic outcomes for students.”

Population Health major graduating student 2016
Appendix: Unit descriptions

Core and complementary units

Health and Illness in Human Populations (PUBH1101)

6 points  Semester 1
This unit introduces students to a population view of health and provides a framework for understanding population health issues. Using this framework, discussions are based on how we know what the major health issues are, who is at risk of ill health, what are the determinants or influences on human health and disease, and what is the potential for prevention.

Tutorials address case studies on current health issues that illustrate the population health approach to describing and addressing patterns of health and disease in populations. One tutorial may comprise a two-hour field trip within metropolitan Perth.

• Level 1 core unit in the Population Health major sequence

Health and Globalisation (PUBH1102)

6 points  Semester 2
This unit introduces students to the concepts of public health, globalisation and the global health agenda. It examines the major threats to global health within the context of the political, economic and demographic changes taking place globally and within specific regions. Topics covered include global patterns of health and disease; the trends and causes of infectious, chronic and environmental disease; demographic, social, economic and political change; poverty; global partnerships; and financing of health and economic improvement. The unit highlights how major health issues transcend local, national and international boundaries.

The unit aims to provide students with the knowledge to discuss major global events and changes taking place and their consequence on health; and skills to participate effectively in initiatives aimed at health improvement as well as efforts to minimise global health risks.

• Level 1 core unit in the Population Health major sequence
• Category A broadening unit for Bachelor of Arts, Bachelor of Commerce and Bachelor of Design students
Disease Prevention and Control (PUBH2204)

6 points  Semester 1
This unit describes the management and control of both communicable (infectious) and non-communicable diseases, including the role of nutritional, cognitive and social issues in designing health interventions. Community health problems in developed and developing countries are reviewed. Examples of control are presented and reviewed in practical sessions.

Cardiovascular disease, diabetes, cancer, emerging epidemics and over-nutrition are studied in some depth in Aboriginal and non-Aboriginal populations. Students investigate strategies to control these diseases including clinical, psychosocial and cultural approaches.

•  Level 2 core unit in the Population Health major sequence

Foundations of Epidemiology and Biostatistics (PUBH2203)

6 points  Semester 2
This unit introduces students to the use of epidemiology and biostatistics as tools in understanding health. The main epidemiological research designs and related statistical analyses are described and evaluated. Discussion focuses on how health and disease are measured and compared across populations and how researchers measure associations between exposures and health outcomes. Analytical skills are developed using statistical computer software (SPSS) for analysis of research data and the critical appraisal of epidemiological studies, which incorporates understanding of the roles of bias, chance and confounding in interpreting study results. The implications of epidemiologic research findings for public policy are also illustrated.

•  Level 2 core unit in the Population Health major sequence
•  Level 2 complementary unit in the Aboriginal Health and Wellbeing major sequence

Aboriginal Health and Wellbeing (AHEA2201)

6 points  Semester 1
This unit is run by the Centre for Aboriginal Medical and Dental Health and Aboriginal organisations in the community. It is directed at students who are interested in learning more about Aboriginal health and helps students improve their understanding of the position of Aboriginal people in contemporary Australian society as a basis for working with Aboriginal people during their health career.
Taught predominantly by Aboriginal people, the unit addresses historical and cultural issues that underlie current Aboriginal health problems and explores specific health issues affecting Aboriginal people. The unit also explores in more detail interactions between Aboriginal and non-Aboriginal service providers in a range of settings and the implications of these experiences on attempts to improve Aboriginal health.

- Level 2 core unit in the Aboriginal Health and Wellbeing major sequence
- Level 2 complementary unit in the Population Health major sequence

**Communication and Project Planning in Health (PUBH2216)**

**6 points  Semester 1**

The aim of this unit is to assist students to enter the workforce with a set of well-developed generic skills required of new graduates, including skills in oral and written communication; time and information management; professional behaviour and interpersonal skills; and project management. The focus is on developing these skills through workshops and seminars in which students work individually, in pairs and in small groups.

A major focus of the unit is working within small teams to develop a project plan allowing the development and application of interpersonal skills and group dynamics. The academic objectives of the unit are to provide students with principles and theory of professional communication; development and application of professional written and oral communication skills and the theory and practice of project planning.

- Level 2 complementary unit in the Aboriginal Health and Wellbeing; Population Health major sequences

**Health Leadership (PUBH3301)**

**6 points  Semester 2**

This unit provides an overview of leadership principles and approaches relevant to leadership in the health sector, with a particular focus on population health. Different ways of describing and fostering the characteristics of effective leadership are reviewed. A distinction is made between management and leadership, and factors contributing to effective leadership in different contexts are explored. Students will consider a range of contemporary issues that impact on health leadership in the twenty-first century, both nationally and internationally.

The concept of leadership at all levels is explored. This includes leading self, leading teams and leading within agencies, sectors or professions. An introduction is provided to several other substantive topics relevant to health leadership, including governance, accountability
and ethical leadership; collaborative and collective leadership, and planning ahead to build leadership capacity for the future. Emphasis is also given to the important role of interpersonal, oral and written communication in health leadership.

- Level 3 core unit in the Population Health major sequence

Health Promotion (PUBH3302)

6 points  Semester 2
This unit provides an introduction to health promotion strategies and interventions that take into account individual, social and environmental determinants of health and examines several approaches to influencing behaviour. Students have the opportunity to develop a health program using a planning and evaluation framework together with an overview of behavioural and social ecological models relevant to health promotion.

The emphasis is on the prevention of chronic diseases which are strongly influenced by individual lifestyles and the changing social and economic environment. Students are involved in designing and implementing a small intervention on campus during the semester. Topics covered include understanding health behaviour, health promotion planning and evaluation, selection of target groups and settings and an introduction to commonly used health promotion strategies.

- Level 3 core unit in the Population Health major sequence

Health Research Design and Methods (PUBH3305)

6 points  Semester 1
This unit provides an overview of both quantitative and qualitative methodology used in health research. It covers a wide range of practical issues regarding successful conduct of a health research study. This includes elements such as identifying appropriate research questions, reviewing and critiquing the scientific literature, developing appropriate research teams, designing instruments for data collection as well as discussing sound sampling and data collection approaches.

Ethical considerations, health consumer participation and stakeholder liaison with health research are also highlighted. High quality research data, both quantitative and qualitative are essential for decision making in public health, and the unit through its dual focus is designed to provide students with necessary skills in health research.

- Level 3 core unit in the Population Health major sequence
Health Systems and Policy (PUBH3307)

6 points  Semester 1
Health systems are a dynamic and complex set of organisations and people, existing in a matrix of policy decisions, financial agreements and organisational interdependence. To understand the way health systems function to protect health and treat illness, it is necessary to understand the organisations involved, the goals and influence of other major stakeholders, and the administrative and financial frameworks that support and regulate functions. Models of resource allocation are evaluated within an understanding of existing disease profiles, prevention options and with a focus on efficiency and equity.

Current health policy initiatives are assessed in terms of organisational reforms and alternative methods of funding. The academic objectives of this unit are to enable students to examine and critically appraise health systems in the context of options for their organisation and funding.

- Level 3 core unit in the Population Health major sequence

Honours Unit descriptions

Population Health Honours Project Part 1 & Population Health Honours Project Part 2 (PUBH4404 & PUBH4405)

12 Points Semester 1 & 2
Honours students participate in original research by the conduct of a supervised research project, a presentation of research findings and preparation of a journal-style scientific manuscript. They also participate in the SPH seminar program. Specifically, students implement a research plan to investigate the research question developed in the unit; collect, manage and analyse their research data using appropriate methods; interpret the results and draw conclusions using published evidence and sound scientific arguments; present a research seminar; and prepare a manuscript. Students are required to attend at least 80 per cent of the school seminar program, or equivalent, with approval of the honours coordinators. Students maintain a reflective journal of these seminars and identify the key messages of each weekly seminar attended and any relevance to their research. They are encouraged to think laterally about what is relevant to their particular project.

This unit provides students with the ability to design and undertake health research and thereby contribute to the future development of population health. It provides students with
the knowledge, skills and values required to conduct scientific research. It is designed to develop enhanced observational skills; relevant practical research skills; lateral thinking and problem solving; literacy and communication skills; as well as professional responsibility and ethical conduct. It also develops and consolidates students’ knowledge and skills acquired during undergraduate study, with particular emphasis on using those skills in a sustained and purposeful way in conducting independent research relevant to population health.

**Epidemiology 1 (PUBH4403)**

*6 points  Semester 1*

This unit covers the principles and methods of epidemiological research. It introduces the principles of epidemiology as well as higher-level coverage of the major study designs (intervention, cohort and case-control studies); the causes and control of bias, confounding, and effect-modification; screening; outbreak investigation; and causation of disease. In addition, it provides an introduction to the newer study designs (e.g. case-crossover). Emphasis is placed on the critical appraisal of published articles in order to enable the student to take an evidence based approach to health policy and practice.

- Honours core unit in Population Health; Aboriginal Health & Wellbeing BSc (Honours)

**Biostatistics (PUBH4401)**

*6 points  Semester 1*

This unit describes and discusses applications of basic biostatistical methods in public health and clinical practice and research. Topics include summarising and presenting data, estimation and hypothesis testing for means, proportions, odds ratios, rates, rate ratios, survival curves and sample size determination. There is an emphasis on developing an in-depth understanding of the role, use and interpretation of basic biostatistical methods and critical appraisal of statistical aspects of health and medical publications. The unit provides the essential foundation of applied knowledge needed for quantitative analyses of health and medical data and for critical reading of literature.

- Honours option unit in Population Health; Aboriginal Health & Wellbeing; Physics BSc (Honours)
Honours Research Process (PUBH4402)

6 points  Semester 1
This unit provides students with the necessary knowledge to enable them to complete and submit a research proposal relevant to their research topic and prepare them for data collection, analysis and writing. The development of their proposal and the undertaking of a substantial literature review and description and justification of their chosen research methods enables students to engage with the literature relevant in a scholarly way. The undertaking of a research proposal seminar enables students to respond to feedback and/or justify the approach taken.

The unit introduces students to the scientific method and philosophical assumptions underpinning research paradigms. It also covers occupational safety and health issues associated with undertaking research; components of a research proposal; data management (including Advanced Word, databases, data security, managing data and passwords); information literacy; an overview of ethics (covered in detail in PAED4401 Research Conduct and Ethics undertaken in semester 2); reviewing the literature; writing a manuscript; research instrument development; community involvement in research; researching with minority/marginalised groups and sensitive issues; qualitative research methods; and experimental and epidemiological research design.

- Honours core unit in Population Health; Aboriginal Health & Wellbeing BSc (Honours)

Research Conduct and Ethics (PAED4401)

6 points  Semester 2
This unit covers the principles of good scientific conduct in research. It has a specific focus on the ethical conduct of research on human participants, but also provides an overview of animal ethics. The unit emphasises the importance of honesty and integrity in science and provides students with an introduction to the ethical basis of scientific requirements such as careful data management and documentation, dealing with conflicts of interest, open publication versus commercialisation of scientific findings, protection of intellectual property, authorship and allocation of credit, errors and mistakes in science.

The unit then goes on to cover ethical issues dealing specifically with humans in research, including the four basic principles (research merit and integrity, justice, beneficence, and respect) and their historical origins; assessment of research benefits versus risk to the participants; risk minimisation; the importance and principles of informed consent; maintenance of participant confidentiality, including de-identification and storage of information and/or biological samples; and working with vulnerable groups.
Students are taught to understand the role and function of institutional ethics committees and important issues for a researcher in working with ethics committees; understand the importance of written and oral consent forms and information sheets; and be aware of current national and local policies and/or guidelines for good ethical conduct. They are presented with representative ethics applications in order to identify and discuss ethical issues that arise in the research world.

Students demonstrate in-depth knowledge of one or more complex ethical areas which may be directly relevant to their honours or postgraduate research project, i.e. animal ethics, dealing with vulnerable or dependent populations (e.g. research on fetuses or pregnant women; infants and children; adults unable to give informed consent; research involving limited disclosure, concealment or deception; human stem cell research, etc.).

Students are taught to understand the role and functioning of institutional ethics committees and important issues for a researcher in working with ethics committees; understand the importance of written and oral consent forms and information sheets; and be aware of current national and local polices and/or guidelines for good ethical conduct. They are presented with representative ethics applications in order to identify and discuss ethical issues that arise in the research world. They also present to their classmates a short presentation on an ethical issue or case-study, either of historical or current interest.

Students demonstrate in-depth knowledge of one or more complex ethical areas which may be directly relevant to their honours or postgraduate research project, i.e. animal ethics, dealing with vulnerable or dependent populations (e.g. research on fetuses or pregnant women; infants and children; adults unable to give informed consent; research involving limited disclosure, concealment or deception; human stem cell research, etc.).

Other electives offered by SPH

Food and Nutrition in Population Health (PUBH2208)

6 points  Semester 2
This unit covers the essential nutrients, their roles and sources; nutrition for different life stages; popular diets; nutrition and chronic disease; Indigenous nutrition; global nutrition issues; and regulation of the food supply.

• Level 2 elective.
Plagues, Pox and Pandemics: the History of Death and Disease (PUBH2209)

6 points  Semester 1
This unit provides students with a valuable historical perspective on changing medical techniques and perceptions in which to locate current and emerging health issues. The topics include historical epidemiological transitions; methodologies and sources; Egyptian, Greek and Roman medicine; the Black Death in fourteenth-century England; the spread of infectious disease in the New World; medical practitioners in medieval and early modern Europe; witchcraft, mental health and religious healing; transitions in medical thought from medieval times to Enlightenment; public health in the Victorian age; warfare and disease; health care, ideology and totalitarian regimes, including Nazi Germany and the Soviet Union; and psychiatry and mental health care.

The unit charts changing relationships between human health, medical technologies, cultural milieux, and environmental resources in past societies. Students have the opportunity to discover and examine original documents for themselves and analyse historical perceptions and realities of health and disease, through case studies using archaeological, paleo-pathological, visual and written evidence of health perceptions in the past. The unit provides students with a valuable historical perspective on changing medical techniques and perceptions in which to locate current and emerging health issues.

• Level 2 elective
• Category A broadening unit for Bachelor of Arts, Bachelor of Commerce and Bachelor of Design students

Population Health Field Trip (PUBH2211)

6 points  Nepal - June/July  India - November/December
This unit is designed to further develop public health knowledge and practice by addressing health issues in a developing country. The location may change from year to year and may be in rural Australia. The unit is tailored for the country that students visit and may involve working with a local non-government organisation (NGO), on a health issue identified as a priority for that NGO; or undertaking a series of site visits. The students interact with the local community members, local health professionals and community groups. The academic objectives are to 1) develop an appreciation and understanding of public health issues in a less developed country or region; 2) develop an understanding of cultural, economic, environmental and social determinants of health; 3) synthesise these factors into an understanding of the health in a less developed region of the world; 4) develop effective
communication skills in a different cultural setting; and 5) build an understanding of an important developing country or region.

We plan to offer the Population Health Field Trip (PUBH2211) every 2-3 years. This unit is available to between 20 and 30 selected Level 2 and Level 3 Population Health and assured pathway students or other undergraduate students studying health. There are two to three seminars prior to travel which address the cultural, social and health context of the area where the field work is conducted.

- Level 2 elective
- Category A broadening unit for Bachelor of Arts, Bachelor of Commerce and Bachelor of Design students

**ACICIS Public Health Study Tour**

The ACICIS (Australian Consortium for ‘In-Country’ Indonesian Studies) Public Health Study Tour is a two-week intensive program for public health students to gain experience in the public health sector in Indonesia. The study tour will provide an introduction to the public health challenges currently facing Indonesia, as well as existing government, international and community-led initiatives tasked with meeting these challenges. This is a unique opportunity for Australian students to hear from leading health professionals, policy-makers and community health workers in Indonesia, and to discuss approaches to health issues with Indonesian counterparts.

The two-week intensive tour is made up of a comprehensive seminar series (26 hours) and a number of field visits to health care facilities, organisations and schools in Indonesia (42 hours) which provide students with an opportunity to see firsthand how the public health system works in Indonesia and to understand the complex challenges it faces.

To be part of this study tour, please apply online: [acicis.edu.au/programs/tour/public-health-study-tour](acicis.edu.au/programs/tour/public-health-study-tour)

- You do not need to enrol in a unit but can claim advanced standing for a Category A, level 1 broadening unit when you return and have successfully completed the tour and assessment.
Population Health Practicum (PUBH3308)

12 points  Semester 1/ mid year break
This unit offers students the opportunity to work with prospective employers, apply theoretical knowledge to the ‘real world’ and gain valuable experience in the health workplace. Students participate in a number of workplace activities and projects to gain experience relevant to a range of health issues specific to the health-related host agency. Through the practicum, students are able to further develop their observational skills, relevant practical skills, lateral thinking and problem solving skills, literacy and communication skills, as well as professional responsibility and ethical conduct. The agency practicum provides an opportunity for students to undertake projects for which they may not have had the resources. It may also provide an opportunity to raise awareness of particular health issues in the community.

The unit will be open to students who are taking the population health major; prerequisite: PUBH2216 Communication and Project Planning in Health. There will be pre-placement workshops at SPH (2 days equivalent) and 4 days at the agency occurring during semester 1. A four-week period of placement during the mid–year break. The learning ePortfolio and report would be submitted at around weeks 3-4 of semester 2.

- Level 3 elective