

University of Pretoria Yearbook 2016

MSc Public Health (10253291)

Duration of study

2 years

Admission requirements

Subject to the stipulations of the General Regulations, a four-year bachelor's degree is required or an honours degree or in the case of a three-year bachelor's degree also applicable practical (work) experience as prescribed by the University plus any other additional work deemed necessary by the head of department: With the proviso that the head of department will have the discretion to decide whether the prerequisite qualification or the qualification plus work experience would be acceptable for admission to the proposed field of study.

Additional requirements

All MSc students must register for, and attend (TNM 800) Applied research methodology 800 satisfactorily. (Exemption may be granted if the module has already been passed for the BScHons degree.) Also consult General Regulations.

Other programme-specific information

Please note: The choice of elective modules has to be approved by the supervisor.

Subject to the stipulations of the General Regulations, the Chairperson of the School may, in consultation with the head of department, approve a fixed limited extension of the period on the grounds of extraordinary circumstances.

Examinations and pass requirements

- i. The minimum pass mark for a module is 50%.
- ii. The prescribed modules must be passed independently of each other.
- iii. Second examinations in the modules are arranged by the head of department, within a period of time specified by him or her.
- iv. No second examinations will be granted in modules in which less than 40% has been obtained. Instead, the module must be repeated in its entirety.
- v. Only with the approval of the Chairperson of the School, on the recommendation of the head of department, will a student be allowed to continue his or her studies after having failed two modules (or the same module twice).



Research information

Research protocol

After registration, a student is required to submit a complete research protocol regarding the proposed dissertation to the Academic Advisory Committee and if necessary, also to the Ethics Committee for approval.

Dissertation

A dissertation on an approved research project must be passed in addition to the coursework. The stipulations of the General Regulations regarding the preparation and submission, the technical editing and the résumé of the dissertation apply.

A systematic literature review (Cochrane type) on an approved subject, which is undertaken in such a manner that bias in minimised, may be presented as an alternative to the dissertation for awarding the MSc degree, provided that the module CLI 870 Principles of clinical epidemiology has been successfully completed. It requires, inter alia, a research protocol with clearly formulated objectives and methods. Inclusion and exclusion methods for the study must be determined. Where applicable, the data must be summarised (meta analysis), with applicable statistical methods.

Pass with distinction

The average mark of the modules, weighted in respect of the number of credits acquired for each individual module, will be the final mark (%) of the coursework.

The degree is conferred with distinction on a student who obtains an average mark of at least 75% in the coursework, as well as a final mark of at least 75% for the dissertation.



Curriculum: Year 1

Minimum credits: 240

Fundamental modules

Scientific writing 871 (HMS 871)

| Module credits | 5.00 | |
|------------------------|--------------------------------|--|
| Contact time | 16 lectures per week | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |
| | | |

Learning in public health 870 (PHM 870)

| Module credits | 5.00 | |
|------------------------|---|--|
| Prerequisites | No prerequisites. | |
| Contact time | 1 seminar per week, 1 discussion class per week, 1 practical per week, 1 other contact session per week, 1 lecture per week | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |

Module content

This is the first (one-week) module at the beginning of the year focusing on learning. At the end of this week, you will have a much better understanding of what you actually want to achieve in public health and what you need to learn to get there. You will probably also have changed your views on learning: from individual surface learning and memorization, to valuing deep learning often in a group context. Finally, you will have achieved the ability to use the ever-increasing knowledge in health, philosophy, and ethics that are generated on the internet to your own best advantage.

Applied research methodology 800 (TNM 800)

| Module credits | 5.00 | |
|-------------------------|--------------------------------|--|
| Prerequisites | BOS 870 | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |
| Module content | | |
| *Attendance module only | | |



Core modules

Biostatistics (1) 870 (BOS 870)

| Module credits | 10.00 | |
|------------------------|--|--|
| Prerequisites | HME 870 | |
| Contact time | 1 practical per week, 16 lectures per week | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |

Biostatistics 2 871 (BOS 871)

| Module credits | 10.00 | |
|------------------------|--|--|
| Prerequisites | BOS 870 | |
| Contact time | 1 practical per week, 16 lectures per week | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |

Dissertation: Public health medicine 890 (GGS 890)

| Module credits | 100.00 | |
|------------------------|------------------------|--|
| Prerequisites | No prerequisites. | |
| Language of tuition | English | |
| Academic organisation | Public Health Medicine | |
| Period of presentation | Year | |

Epidemiology 1 870 (HME 870)

| Module credits | 10.00 | |
|------------------------|---|--|
| Prerequisites | No prerequisites. | |
| Contact time | 1 practical per week, 1 other contact session per week, 1 discussion class per week, 1 seminar per week, 1 lecture per week | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |
| | | |

Module content

The principles of epidemiology including applied epidemiology (e.g. infectious disease epidemiology, clinical epidemiology and operational research). The use of EpiData software for questionnaire design and data collection.



Elective modules

Principles of clinical epidemiology 870 (CLI 870)

| Module credits | 10.00 | |
|------------------------|--|--|
| Prerequisites | HME 870 | |
| Contact time | 3 discussion classes per week, 3 seminars per week, 1 practical per week | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |

Principles of demography 870 (DEG 870)

| Module credits | 5.00 | |
|------------------------|---|--|
| Prerequisites | No prerequisites. | |
| Contact time | 1 lecture per week, 1 discussion class per week, 1 other contact session per week, 1 seminar per week, 1 practical per week | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |

Health risk assessment 871 (EHM 871)

| Module credits | 10.00 | |
|------------------------|--------------------------------|--|
| Service modules | Faculty of Veterinary Science | |
| Prerequisites | EOH 871 | |
| Language of tuition | English | |
| Academic organisation | School of Health Syst & Public | |
| Period of presentation | Year | |

Methods in exposure assessment 872 (EHM 872)

| Module credits | 10.00 |
|------------------------|--------------------------------|
| Prerequisites | EOM 870 |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Environmental chemical pollution and health 873 (EHM 873)

| Module credits | 5.00 |
|----------------|-------------------|
| Prerequisites | No prerequisites. |



| Contact time | 16 lectures per week |
|------------------------|--------------------------------|
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Introduction to toxiocology 871 (EOH 871)

| Module credits | 5.00 |
|------------------------|--|
| Prerequisites | HME 870 |
| Contact time | 1 practical per week, 16 lectures per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Environmental epidemiology 870 (EOM 870)

| Module credits | 10.00 |
|------------------------|--|
| Prerequisites | HME 870, BOS 870 |
| Contact time | 16 lectures per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Module content

This module is an introduction of the various types of epidemiological study designs that are applied in the investigation of the association between environmental exposures and health outcomes. Apart from the classical epidemiological study designs (cross-sectional, case-control and cohort designs that are introduced in HME 870), other study designs such as the time-series, case-crossover, panel, spatial, genetic and molecular study designs are introduced and discussed. The statistical techniques that are applied in the time-series, case-crossover, panel, spatial, genetic and molecular study designs are discussed as well as the implication of random and systematic errors in exposure/health assessment on the measures of associations; hence a basic biostatistics vocabulary (introduced in BOS 870) is required.

| Module credits | 10.00 |
|---|--|
| Prerequisites | BOS 870 |
| Contact time | 12 lectures per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |
| Prerequisites Contact time Language of tuition Academic organisation | BOS 870 12 lectures per week, 1 practical per week English School of Health Syst & Public |

Conducting surveys 873 (EPM 873)



Disease surveillance 874 (EPM 874)

| Module credits | 5.00 |
|------------------------|--|
| Prerequisites | No prerequisites. |
| Contact time | 3 discussion classes per week, 1 practical per week, 3 seminars per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Monitoring and evaluation 873 (HME 873)

| Module credits | 15.00 |
|------------------------|---|
| Service modules | Faculty of Veterinary Science |
| Prerequisites | No prerequisites. |
| Contact time | 2 lectures per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Qualitative research methods 870 (QHR 870)

| Module credits | 10.00 |
|------------------------|--------------------------------|
| Service modules | Faculty of Veterinary Science |
| Prerequisites | No prerequisites. |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |



Curriculum: Final year

Minimum credits: 240

Fundamental modules

Scientific writing 871 (HMS 871)

| Module credits | 5.00 |
|------------------------|--------------------------------|
| Contact time | 16 lectures per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |
| | |

Learning in public health 870 (PHM 870)

| Module credits | 5.00 |
|------------------------|---|
| Prerequisites | No prerequisites. |
| Contact time | 1 seminar per week, 1 discussion class per week, 1 practical per week, 1 other contact session per week, 1 lecture per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Module content

This is the first (one-week) module at the beginning of the year focusing on learning. At the end of this week, you will have a much better understanding of what you actually want to achieve in public health and what you need to learn to get there. You will probably also have changed your views on learning: from individual surface learning and memorization, to valuing deep learning often in a group context. Finally, you will have achieved the ability to use the ever-increasing knowledge in health, philosophy, and ethics that are generated on the internet to your own best advantage.

Applied research methodology 800 (TNM 800)

| Module credits | 5.00 |
|-------------------------|--------------------------------|
| Prerequisites | BOS 870 |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |
| Module content | |
| *Attendance module only | |



Core modules

Biostatistics (1) 870 (BOS 870)

| Module credits | 10.00 |
|------------------------|--|
| Prerequisites | HME 870 |
| Contact time | 1 practical per week, 16 lectures per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Biostatistics 2 871 (BOS 871)

| Module credits | 10.00 |
|------------------------|--|
| Prerequisites | BOS 870 |
| Contact time | 1 practical per week, 16 lectures per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Dissertation: Public health medicine 890 (GGS 890)

| Module credits | 100.00 |
|------------------------|------------------------|
| Prerequisites | No prerequisites. |
| Language of tuition | English |
| Academic organisation | Public Health Medicine |
| Period of presentation | Year |

Epidemiology 1 870 (HME 870)

| Module credits | 10.00 |
|------------------------|---|
| Prerequisites | No prerequisites. |
| Contact time | 1 practical per week, 1 other contact session per week, 1 discussion class per week, 1 seminar per week, 1 lecture per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |
| | |

Module content

The principles of epidemiology including applied epidemiology (e.g. infectious disease epidemiology, clinical epidemiology and operational research). The use of EpiData software for questionnaire design and data collection.



Elective modules

Principles of clinical epidemiology 870 (CLI 870)

| Module credits | 10.00 |
|------------------------|--|
| Prerequisites | HME 870 |
| Contact time | 3 discussion classes per week, 3 seminars per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Principles of demography 870 (DEG 870)

| Module credits | 5.00 |
|------------------------|---|
| Prerequisites | No prerequisites. |
| Contact time | 1 lecture per week, 1 discussion class per week, 1 other contact session per week, 1 seminar per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Health risk assessment 871 (EHM 871)

| Module credits | 10.00 |
|------------------------|--------------------------------|
| Service modules | Faculty of Veterinary Science |
| Prerequisites | EOH 871 |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Methods in exposure assessment 872 (EHM 872)

| Module credits | 10.00 |
|------------------------|--------------------------------|
| Prerequisites | EOM 870 |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Environmental chemical pollution and health 873 (EHM 873)

| Module credits | 5.00 |
|----------------|-------------------|
| Prerequisites | No prerequisites. |



| Contact time | 16 lectures per week |
|------------------------|--------------------------------|
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Introduction to toxiocology 871 (EOH 871)

| Module credits | 5.00 |
|------------------------|--|
| Prerequisites | HME 870 |
| Contact time | 1 practical per week, 16 lectures per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Environmental epidemiology 870 (EOM 870)

| Module credits | 10.00 |
|------------------------|--|
| Prerequisites | HME 870, BOS 870 |
| Contact time | 16 lectures per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Module content

This module is an introduction of the various types of epidemiological study designs that are applied in the investigation of the association between environmental exposures and health outcomes. Apart from the classical epidemiological study designs (cross-sectional, case-control and cohort designs that are introduced in HME 870), other study designs such as the time-series, case-crossover, panel, spatial, genetic and molecular study designs are introduced and discussed. The statistical techniques that are applied in the time-series, case-crossover, panel, spatial, genetic and molecular study designs are discussed as well as the implication of random and systematic errors in exposure/health assessment on the measures of associations; hence a basic biostatistics vocabulary (introduced in BOS 870) is required.

| Conducting surveys 675 (EFM 675) | |
|---|--|
| Module credits | 10.00 |
| Prerequisites | BOS 870 |
| Contact time | 12 lectures per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |
| Prerequisites Contact time Language of tuition Academic organisation | BOS 870 12 lectures per week, 1 practical per week English School of Health Syst & Public |

Conducting surveys 873 (EPM 873)



Disease surveillance 874 (EPM 874)

| Module credits | 5.00 |
|------------------------|--|
| Prerequisites | No prerequisites. |
| Contact time | 3 discussion classes per week, 1 practical per week, 3 seminars per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Monitoring and evaluation 873 (HME 873)

| Module credits | 15.00 |
|------------------------|---|
| Service modules | Faculty of Veterinary Science |
| Prerequisites | No prerequisites. |
| Contact time | 2 lectures per week, 1 practical per week |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |

Qualitative research methods 870 (QHR 870)

| Module credits | 10.00 |
|------------------------|--------------------------------|
| Service modules | Faculty of Veterinary Science |
| Prerequisites | No prerequisites. |
| Language of tuition | English |
| Academic organisation | School of Health Syst & Public |
| Period of presentation | Year |
| | |

The information published here is subject to change and may be amended after the publication of this information. The **General Regulations (G Regulations)** apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the **General Rules** section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.