

# University of Pretoria Yearbook 2016

# MSc Biostatistics (10253110)

**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.

In the case of the field of study Biostatistics, an applicable honours degree is required, with Statistics at honours level.

## 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

#### **Core modules**

#### Individual study in public health 872 (ACM 872)

Module credits 20.00

**Prerequisites** No prerequisites.

**Contact time** 16 lectures per week

**Language of tuition** English

Academic organisation School of Health Syst & Public

**Period of presentation** Year

## Survival analysis 873 (BOS 873)

Module credits 5.00

Prerequisites BOS 871

**Contact time** 3 seminars per week, 1 practical per week, 3 discussion classes per week

**Language of tuition** English

Academic organisation School of Health Syst & Public

**Period of presentation** Year

### Epidemiology 2 870 (EPM 870)

Module credits 5.00

**Prerequisites** BOS 871 and EPM 871

**Contact time** lectures and practicals

**Language of tuition** English

**Academic organisation** School of Health Syst & Public

**Period of presentation** Year

## **Conducting surveys 873 (EPM 873)**

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



## 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

### 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

#### **Elective modules**

### **Principles: Chronic disease epidemiology 870 (CDE 870)**

Module credits 5.00

**Prerequisites** No prerequisites.

**Contact time** 1 practical per week, 3 discussion classes per week, 3 seminars per week

**Language of tuition** English

Academic organisation School of Health Syst & Public

**Period of presentation** Year

### **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

#### **Evidence-based medicine 871 (CLI 871)**

Module credits 12.00

Prerequisites CLI 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

#### 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

## **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



## Curriculum: Final year

Minimum credits: 240

#### **Core modules**

## Individual study in public health 872 (ACM 872)

Module credits 20.00

**Prerequisites** No prerequisites.

**Contact time** 16 lectures per week

**Language of tuition** English

Academic organisation School of Health Syst & Public

**Period of presentation** Year

## Survival analysis 873 (BOS 873)

Module credits 5.00

Prerequisites BOS 871

**Contact time** 3 seminars per week, 1 practical per week, 3 discussion classes per week

**Language of tuition** English

Academic organisation School of Health Syst & Public

**Period of presentation** Year

### Epidemiology 2 870 (EPM 870)

Module credits 5.00

**Prerequisites** BOS 871 and EPM 871

**Contact time** lectures and practicals

**Language of tuition** English

**Academic organisation** School of Health Syst & Public

**Period of presentation** Year

## **Conducting surveys 873 (EPM 873)**

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



### 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

### 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

## Dissertation: Quantitative health legislation 890 (KGW 890)

Module credits 240.00

**Prerequisites** No prerequisites.

**Language of tuition** Both Afr and Eng

Academic organisation Public Health Medicine

**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



#### 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

#### **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

#### **Evidence-based medicine 871 (CLI 871)**

Module credits 12.00
Prerequisites CLI 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

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.

<sup>\*</sup>Attendance module only



