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# University of Pretoria Yearbook 2016

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## BScHons Pharmacology (10243161)

**Duration of study** 1 year

**Contact** Prof AD Cromarty [duncan.cromarty@up.ac.za](mailto:duncan.cromarty@up.ac.za) +27 (0)123192622

### Programme information

The following requirements are set for completing the programme:

- Advanced instruction by means of self-tuition and four compulsory seminars of which at least one must be read to and defended before the department in question, on topics assigned to the student.
- Practical experience of the laboratory techniques used in the particular subsections of the subject.
- Attendance at the compulsory faculty module (TNM 800) Applied research methodology 800.
- Attendance at the prescribed module (MBS 800) Medical biostatistics 800.
- Taking part in a research project and presentation of an independent research report.
- Satisfactory attendance at a library-user course.

### Admission requirements

- A candidate must hold a bachelor's degree deemed acceptable by the head of department for the proposed field of study or an equivalent qualification deemed acceptable by the Senate of the University for the proposed field of study with at least one applicable biological subject as major subject.
- Admission to the study for an honours degree is subject to the approval of the head of department: with the proviso that a candidate who has obtained an average of less than 60% in the modules of his or her major subject in the final year of the bachelor's degree study may only be admitted with the Dean's approval on the recommendation of the head of department. Additional requirements may be set by the head of department.

### Additional requirements

A minimum average of 60% in Pharmacology at undergraduate level.

In addition, the modules (FAR 381, 382) Pharmacology 381, 382 must be completed at the Department of Pharmacology, if not completed at undergraduate level.

Exemption from the examination in FAR 381, 382 may be granted if a student, who obtained a module mark of at least 60%, exercises the option to accept this as the final mark.

The prerequisites for admission to the honours degree in certain fields of study are indicated in the syllabuses of the specific department.

Also consult General Regulations.



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## Examinations and pass requirements

- i. The examination at the end of the programme will consist of two written papers of three hours each as well as an oral examination of 30 minutes.
- ii. For the field of specialisation Medical Physics, one examination of three hours is required in each of the theoretical modules. The mark awarded to the practical work will also be taken into account when the final mark is calculated.
- iii. The maximum period for completion of the honours degree, is two years in the case of full-time students and three years in the case of part-time students. In exceptional circumstances, a student may apply, in writing, to the head of department for an extension of the period of study.
- iv. To comply with the pass requirements for the degree, a student must obtain a final mark of at least 50% in each division as indicated, as well as a pass mark of at least 50% for the essay/work assignment (if applicable). The stipulations regarding pass requirements for dissertations in the General Regulations apply mutatis mutandis to essays.

## Pass with distinction

The degree is conferred with distinction on a student who has obtained an average of at least 75% in the examination (written, oral, practical, etc).



## Curriculum: Year 1

Minimum credits: 120

### Core modules

#### Pharmacology 705 (FAR 705)

**Module credits** 96.00

**Prerequisites** No prerequisites.

**Contact time** Sixteen times per week, 6 lectures per week

**Language of tuition** English

**Academic organisation** Pharmacology

**Period of presentation** Year

#### Module content

Covers the following topics: Immunology, pain and inflammation, pharmacokinetics, wound healing, proteomics, isotopes in medicine, pharmacogenetics, law, pharmaceuticals, traditional medicines, plant-based medicines, lifestyle disorders, drug/drug interactions, drug adverse effects, malaria, cancer and malignancies and psycho/neuropharmacology, Good Clinical Practice (GCP), Good Laboratory Practice (GLP), Therapeutic Drug Monitoring (TDM), Overview of dispensing medicine. Practicals are as per study guide.

#### Medical biostatistics 800 (MBS 800)

**Module credits** 20.00

**Prerequisites** No prerequisites.

**Contact time** 1 lecture per week

**Language of tuition** English

**Academic organisation** Statistics

**Period of presentation** Semester 1

#### 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



## Pharmacology 381 (FAR 381)

<b>Module credits</b>	18.00
<b>Service modules</b>	Faculty of Natural and Agricultural Sciences
<b>Prerequisites</b>	FLG 211, FLG 212, FLG 221, FLG 222 GS
<b>Contact time</b>	2 lectures per week
<b>Language of tuition</b>	Double Medium
<b>Academic organisation</b>	Pharmacology
<b>Period of presentation</b>	Semester 1

### Module content

Introduction, receptors, antagonism, kinetic principles, drugs that impact upon the autonomic and central nervous system, pharmacotherapy of hypertension, angina pectoris, myocardial infarction, heart failure, arrhythmias, and epilepsy. Diuretics, glucocorticosteroids, local anaesthetics, anaesthetic drugs, analgesics, iron and vitamins, oncostatics and immuno suppressants.

## Pharmacology 382 (FAR 382)

<b>Module credits</b>	18.00
<b>Service modules</b>	Faculty of Natural and Agricultural Sciences
<b>Prerequisites</b>	FAR 381, FLG 211, FLG 212, FLG 221, FLG 222 GS
<b>Contact time</b>	2 lectures per week
<b>Language of tuition</b>	Double Medium
<b>Academic organisation</b>	Pharmacology
<b>Period of presentation</b>	Semester 2

### Module content

Hormones, drugs that act on the histaminergic, serotonergic, and dopaminergic receptors. Pharmacotherapy of diabetes mellitus, schizophrenia, depression, obesity, anxiety, insomnia, gastro-intestinal diseases. Anticoagulants, antimicrobial drugs.



## Curriculum: Final year

Minimum credits: 120

### Core modules

#### Pharmacology 705 (FAR 705)

**Module credits** 96.00

**Prerequisites** No prerequisites.

**Contact time** Sixteen times per week, 6 lectures per week

**Language of tuition** English

**Academic organisation** Pharmacology

**Period of presentation** Year

#### Module content

Covers the following topics: Immunology, pain and inflammation, pharmacokinetics, wound healing, proteomics, isotopes in medicine, pharmacogenetics, law, pharmaceuticals, traditional medicines, plant-based medicines, lifestyle disorders, drug/drug interactions, drug adverse effects, malaria, cancer and malignancies and psycho/neuropharmacology, Good Clinical Practice (GCP), Good Laboratory Practice (GLP), Therapeutic Drug Monitoring (TDM), Overview of dispensing medicine. Practicals are as per study guide.

#### Medical biostatistics 800 (MBS 800)

**Module credits** 20.00

**Prerequisites** No prerequisites.

**Contact time** 1 lecture per week

**Language of tuition** English

**Academic organisation** Statistics

**Period of presentation** Semester 1

#### 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



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<b>Module credits</b>	18.00
<b>Service modules</b>	Faculty of Natural and Agricultural Sciences
<b>Prerequisites</b>	FLG 211, FLG 212, FLG 221, FLG 222 GS
<b>Contact time</b>	2 lectures per week
<b>Language of tuition</b>	Double Medium
<b>Academic organisation</b>	Pharmacology
<b>Period of presentation</b>	Semester 1

### Module content

Introduction, receptors, antagonism, kinetic principles, drugs that impact upon the autonomic and central nervous system, pharmacotherapy of hypertension, angina pectoris, myocardial infarction, heart failure, arrhythmias, and epilepsy. Diuretics, glucocorticosteroids, local anaesthetics, anaesthetic drugs, analgesics, iron and vitamins, oncostatics and immuno suppressants.

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<b>Contact time</b>	2 lectures per week
<b>Language of tuition</b>	Double Medium
<b>Academic organisation</b>	Pharmacology
<b>Period of presentation</b>	Semester 2

### Module content

Hormones, drugs that act on the histaminergic, serotonergic, and dopaminergic receptors. Pharmacotherapy of diabetes mellitus, schizophrenia, depression, obesity, anxiety, insomnia, gastro-intestinal diseases. Anticoagulants, antimicrobial drugs.

## Medical biostatistics 800 (MBS 800)

<b>Module credits</b>	20.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 lecture per week
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<b>Academic organisation</b>	Statistics
<b>Period of presentation</b>	Semester 1

## Applied research methodology 800 (TNM 800)

<b>Module credits</b>	5.00
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<b>Prerequisites</b>	BOS 870
<b>Language of tuition</b>	English
<b>Academic organisation</b>	School of Health Syst & Public
<b>Period of presentation</b>	Year

**Module content**

\*Attendance module only

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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.