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# University of Pretoria Yearbook 2016

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## BScHons Microbiology (03240911)

**Duration of study** 1 year

**Total credits** 135

### Programme information

#### Renewal of registration

- i. Subject to exceptions approved by the Dean, on the recommendation of the head of department, and in the case of distance education where the Dean formulates the stipulations that will apply, a student may not sit for an examination for the honours degree more than twice in the same module.
- ii. A student for an honours degree must complete his or her study, in the case of full-time students, within two years and, in the case of after-hours students, within three years of first registering for the degree and, in the case of distance education students, within the period stipulated by the Dean. Under special circumstances, the Dean, on the recommendation of the head of department, may give approval for a limited extension of this period.

In calculating marks, General Regulation G.12.2 applies.

Apart from the prescribed coursework, a research project is an integral part of the study.

### Admission requirements

An average pass mark of 60% or more in at least four modules presented by the Department of Microbiology and Plant Pathology at 300-level (one of which must be MBY 364) or permission by the head of department. Note that additional modules may be prescribed by the head of the department where deemed necessary.

### Pass with distinction

The BScHons degree is awarded with distinction to a candidate who obtains a weighted average of at least 75% in all the prescribed modules and a minimum of 65% in any one module.



## Curriculum: Final year

**Minimum credits: 135**

### Core modules

#### Molecular and cellular biology 721 (MLB 721)

<b>Module credits</b>	15.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 discussion classes per week
<b>Language of tuition</b>	English
<b>Academic organisation</b>	Microbiology and Plant Path
<b>Period of presentation</b>	Semester 2

#### Module content

Principles and applications of recombinant DNA, and other novel molecular and genomics technologies, to address questions in the biological sciences and/or biotechnology. Strong emphasis is placed on the principles of research planning, including identifying suitable research objectives, formulating a research strategy and understanding the relevance and feasibility of research. The module is assessed by means of a research project proposal, conceived and formulated by each student. The proposal must focus on the use of molecular technologies in addressing realistic questions in biology and/or biotechnology. There is also an oral defense of the project proposal.

This module is jointly presented in the departments of Biochemistry, Genetics and Microbiology and Plant Pathology.

#### Research methods 751 (MCP 751)

<b>Module credits</b>	30.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	7 lectures per week, 5 practicals per week
<b>Language of tuition</b>	English
<b>Academic organisation</b>	Microbiology and Plant Path
<b>Period of presentation</b>	Year

#### Module content

The module provides students with planning, data handling, writing, and presentation skills required for microbiological research. In addition, students are provided with hands-on experience in the advanced techniques utilised in research and analysis. Ethical and philosophical issues in the broader field of Microbiology and Plant Pathology are also addressed.

#### Seminar course 752 (MCP 752)

<b>Module credits</b>	15.00
<b>Prerequisites</b>	No prerequisites.



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**Contact time** 2 seminars per week, 3 discussion classes per week

**Language of tuition** English

**Academic organisation** Microbiology and Plant Path

**Period of presentation** Year

**Module content**

Students are guided to collect relevant literature from disparate papers in the broader field of Microbiology and Plant Pathology and to condense and collate this into a written seminar, which is also presented verbally.

### Trends in microbiology 753 (MCP 753)

**Module credits** 15.00

**Prerequisites** No prerequisites.

**Contact time** 3 discussion classes per week, 2 seminars per week

**Language of tuition** English

**Academic organisation** Microbiology and Plant Path

**Period of presentation** Year

**Module content**

Discussions and essays focusing on recent advances in the broader field of Microbiology and Plant Pathology, as well as contextualising these developments within the broader framework of the Biosciences and its role in modern society.

### Research project and literature study 754 (MCP 754)

**Module credits** 60.00

**Prerequisites** No prerequisites.

**Language of tuition** English

**Academic organisation** Microbiology and Plant Path

**Period of presentation** Year

**Module content**

The module includes both practical and theoretical components. In addition to an individual research project with well-defined limits that is undertaken under the guidance of a lecturer, the module also acquaint the student with the theoretical aspects relevant to a specific research topic. The research project is thus preceded by the presentation of an in-depth review of the relevant literature, and the project is concluded with a progress report, presented in the format of a short publication and an oral presentation.

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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.