

# University of Pretoria Yearbook 2021

# BScHons Biochemistry (02240701)

Department	Genetics
Minimum duration of study	1 year
Total credits	135
NQF level	08

# **Programme information**

# **Renewal of registration**

- i. Subject to exceptions approved by the Dean, on the recommendation of the relevant head of department, 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. Under special circumstances, the Dean, on the recommendation of the relevant 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

- 1. Relevant BSc degree
- 2. A weighted average of at least 60% in Biochemistry at final-year level
- 3. An admission examination may be required

# Other programme-specific information

- A pass mark is required for all the components of the honours programme and the average mark is calculated proportionally to the credits.
- Additional modules can be prescribed to remedy shortcomings in a candidate's undergraduate training.

# 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

### Additional information:

Suitably qualified candidates may also apply for the interdepartmental BScHons Biotechnology (Code 02240393) with a registration in the Division of Biochemistry. For more information, please refer to the programme information for the BScHons Biotechnology.

# **Core modules**

### Scientific communication 771 (BCM 771)

Module credits	15.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 1 seminar per week
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Year

#### Module content

Students are guided to collect relevant and up-to-date literature on broad topics from databases using referencing software, and to select and condense relevant papers into the outline for a literature review. Critical reading of research papers, article discussions and presentations. Scientific writing and presentation skills.

# Research project and report 773 (BCM 773)

Module credits	60.00	
NQF Level	08	
Prerequisites	No prerequisites.	
Contact time	1 other contact session per week	
Language of tuition	Module is presented in English	
Department	Biochemistry, Genetics and Microbiology	
Period of presentation	Year	
Research methods 774 (BCM 774)		
Module credits	25.00	
NQF Level	08	
Prerequisites	No prerequisites.	
Contact time	2 Practicals/Discussion classes per week	
Language of tuition	Module is presented in English	



### Period of presentation Year

### **Module content**

Students are guided through the methodology of research planning and data handling. They are given hands-on and in-depth practical experience in a range of biochemcial and molecular biological techniques.

# Advanced biochemistry 775 (BCM 775)

Module credits	20.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	1 Practical or 2 Discussion classes per week
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Year

### Module content

This module covers current topics in biochemistry, selected due to their applications in academia and industry. The course has a clear focus on research induction, providing students with the opportunity for individual learning in a laboratory environment. Ethical and philosophical issues in the broader field of the cellular and molecular sciences are also addressed.

# Molecular and cellular biology 721 (MLB 721)

Module credits	15.00
NQF Level	08
Prerequisites	No prerequisites.
Contact time	2 discussion classes per week
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Year

#### 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 and Soil Sciences.



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.