

University of Pretoria Yearbook 2022

Molecular and cell biology 111 (MLB 111)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	16.00
NQF Level	05
Programmes	BEEd (Senior Phase and Further Education and Training Teaching)
	BSc (Computer Science)
	BSc (Information and Knowledge Systems)
	BChD
	MBChB
	BDietetics
	BSc (Meteorology)
	BSc (Biochemistry)
	BSc (Biological Sciences)
	BSc (Biotechnology)
	BSc (Chemistry)
	BSc (Culinary Science)
	BSc (Ecology)
	BSc (Entomology)
	BSc (Food Science)
	BSc (Genetics)
	BSc (Geography and Environmental Science)
	BSc (Human Genetics)
	BSc (Human Physiology)
	BSc (Human Physiology, Genetics and Psychology)
	BSc (Medical Sciences)
	BSc (Microbiology)
	BSc (Nutrition)
	BSc (Physics)

BSc (Plant Science)

BSc (Zoology)

BScAgric (Agricultural Economics and Agribusiness Management)

BScAgric (Animal Science)

BScAgric (Applied Plant and Soil Sciences)

BScAgric (Plant Pathology)

BVSc

Service modules

Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

Faculty of Health Sciences

Faculty of Veterinary Science

Prerequisites

A candidate who has passed Mathematics with at least 60% in the Grade 12 examination

Contact time

1 practical/tutorial per week, 4 lectures per week

Language of tuition

Module is presented in English

Department

Biochemistry, Genetics and Microbiology

Period of presentation

Semester 1

Module content

Introduction to the molecular structure and function of the cell. Basic chemistry of the cell. Structure and composition of prokaryotic and eukaryotic cells. Ultrastructure and function of cellular organelles, membranes and the cytoskeleton. General principles of energy, enzymes and cell metabolism. Selected processes, e.g. glycolysis, respiration and/or photosynthesis. Introduction to molecular genetics: DNA structure and replication, transcription, translation. Cell growth and cell division.

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.