



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	BEd (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.

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