



# University of Pretoria Yearbook 2019

## Molecular and cell biology 111 (MLB 111)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	Faculty of Natural and Agricultural Sciences
<b>Module credits</b>	16.00
<b>Programmes</b>	BEd Senior Phase and Further Education and Training Teaching BSc Computer Science BSc Information and Knowledge Systems BChD BDietetics MBChB BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Culinary Science BSc Ecology BSc Entomology BSc Environmental Sciences BSc Food Science BSc Genetics 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

<b>Service modules</b>	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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