



University of Pretoria Yearbook 2022

Bacteriology 251 (MBY 251)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	12.00
NQF Level	06
Programmes	BSc (Information and Knowledge Systems) BSc (Biochemistry) 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 (Medical Sciences) BSc (Microbiology) BSc (Plant Science) BSc (Zoology) BScAgric (Plant Pathology)
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	MBY 161 GS
Contact time	2 lectures per week, fortnightly practicals
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Semester 1



Module content

Growth, replication and survival of bacteria, Energy sources, harvesting from light versus oxidation, regulation of catabolic pathways, chemotaxis. Nitrogen metabolism, iron-scavenging. Alternative electron acceptors: denitrification, sulphate reduction, methanogenesis. Bacterial evolution, systematic and genomics. Biodiversity; bacteria occurring in the natural environment (soil, water and air), associated with humans, animals, plants, and those of importance in foods and in the water industry.

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