



# University of Pretoria Yearbook 2022

## Bacteriology 251 (MBY 251)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	Faculty of Natural and Agricultural Sciences
<b>Module credits</b>	12.00
<b>NQF Level</b>	06
<b>Programmes</b>	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)
<b>Service modules</b>	Faculty of Engineering, Built Environment and Information Technology
<b>Prerequisites</b>	MBY 161 GS
<b>Contact time</b>	2 lectures per week, fortnightly practicals
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Biochemistry, Genetics and Microbiology
<b>Period of presentation</b>	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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