

# University of Pretoria Yearbook 2021

## Introductory biochemistry 257 (BCM 257)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	12.00
<b>NQF Level</b>	06
<b>Programmes</b>	<a href="#">BDietetics</a>
	<a href="#">BSc Biochemistry</a>
	<a href="#">BSc Biotechnology</a>
	<a href="#">BSc Chemistry</a>
	<a href="#">BSc Culinary Science</a>
	<a href="#">BSc Ecology</a>
	<a href="#">BSc Entomology</a>
	<a href="#">BSc Food Science</a>
	<a href="#">BSc Genetics</a>
	<a href="#">BSc Human Genetics</a>
	<a href="#">BSc Human Physiology</a>
	<a href="#">BSc Human Physiology, Genetics and Psychology</a>
	<a href="#">BSc Medical Sciences</a>
	<a href="#">BSc Microbiology</a>
	<a href="#">BSc Nutrition</a>
	<a href="#">BSc Plant Science</a>
	<a href="#">BSc Zoology</a>
	<a href="#">BScAgric Animal Science</a>
<b>Prerequisites</b>	CMY 117 GS and CMY 127 GS and MLB 111 GS
<b>Contact time</b>	1 tutorial per week, 2 lectures per week
<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

Chemical foundations. Weak interactions in aqueous systems. Ionisation of water, weak acids and weak bases. Buffering against pH changes in biological systems. Water as a reactant and function of water. Carbohydrate structure and function. Biochemistry of lipids and membrane structure. Nucleotides and nucleic acids. Other functions of nucleotides: energy carriers, components of enzyme cofactors and chemical messengers. Introduction to metabolism. Bioenergetics and biochemical reaction types. Online activities include introduction to laboratory safety and Good Laboratory Practice; basic biochemical calculations; experimental method design and scientific controls, processing and presentation of scientific data.

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