

# University of Pretoria Yearbook 2022

## Eukaryotic gene control and development 351 (GTS 351)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	Faculty of Natural and Agricultural Sciences
<b>Module credits</b>	18.00
<b>NQF Level</b>	07
<b>Programmes</b>	BSc (Biochemistry)
	BSc (Biotechnology)
	BSc (Entomology)
	BSc (Genetics)
	BSc (Human Genetics)
	BSc (Human Physiology)
	BSc (Human Physiology, Genetics and Psychology)
	BSc (Medical Sciences)
	BSc (Microbiology)
	BSc (Plant Science)
	BSc (Zoology)
<b>Prerequisites</b>	GTS 251 GS and GTS 261 GS
<b>Contact time</b>	1 practical/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

Regulation of gene expression in eukaryotes: regulation at the genome, transcription, RNA processing and translation levels. DNA elements and protein factors involved in gene control. The role of chromatin structure and epigenetic changes. Technology and experimental approaches used in studying eukaryotic gene control. Applications of the principles of gene control in eg cell signaling pathways, development cancer and other diseases in humans.

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