

University of Pretoria Yearbook 2021

Genetics in human health 368 (GTS 368)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	18.00
NQF Level	07
Programmes	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
Prerequisites	GTS 251 and GTS 261 GS
Contact time	1 practical/tutorial per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Semester 2

Module content

Application of modern genetics to human variability, health and disease. Molecular origin of Mendelian and multifactorial diseases. The use of polymorphisms, gene mapping, linkage and association studies in medical genetics. Genetic diagnosis: application of cytogenetic, molecular and genomic techniques. Congenital abnormalities, risk assessment and genetic consultation. Prenatal testing, population screening, treatment of genetic diseases and gene-based therapy. Pharmacogenetics and cancer genetics. Ethical aspects in medical genetics.

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