Genetics

Year and Campus:	2016
Coordinator:	Prof James Camakaris
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Overview:	The Graduate Diploma allows students who have completed an undergraduate degree to re-focus or expand their body of knowledge by completing the requirement of one of the undergraduate majors (or equivalent) in the Bachelor of Science not already completed. Students will be required to have completed level 1 prerequisites. This provides a pathway to the Master of Science Streams.
Learning Outcomes:	Students who complete the graduate diploma should: # Demonstrate an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values; # Apply critical and analytical skills and methods to the identification and resolution of problems # Act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force; # Communicate effectively; # Commit to continuous learning; # Be proficient in the use of appropriate modern technologies, such as the computer and other information technology systems, for the acquisition, processing and interpretation of data.
Structure & Available Subjects:	Completion of 100 points: # 50 points of study at Level 3; # 50 points of study at Level 2 or above.
Subject Options:	*Subject prerequisites –at least 25 points of level 1 or above biological sciences subject.*

Level 2

Students should select 50 points of level 2 options to meet the pre-requisites for their level 3 choices.

Students must take:

Subject	Study Period Commencement:	Credit Points:
GENE20001 Principles of Genetics	Semester 1	12.50
GENE20002 Genes and Genomes	Semester 2	12.50
GENE20003 Experiments in Genetics	Semester 2	12.50

Plus 12.5 points at Level 2 or 3

** Depending on Level 3 choices, students may need Level 2 Biology, Botany, Anatomy, Physiology, Biochemistry and Molecular Biology, Ecology, DASC.*

Level 3

All three of:

Subject	Study Period Commencement:	Credit Points:
GENE30001 Evolutionary Genetics and Genomics	Semester 1	12.50
GENE30002 Genes: Organisation and Function	Semester 1	12.50

	GENE30004 Genetic Analysis	Semester 2	12.50

Plus one elective selected from:

Subject	Study Period Commencement:	Credit Points:
BCMB30001 Protein Structure and Function	Semester 2	12.50
BCMB30003 Molecular Aspects of Cell Biology	Semester 1	12.50
BIOL30001 Reproductive Physiology	Semester 2	12.50
BOTA30003 Environmental Plant Physiology	Semester 1	12.50
CEDB30002 Concepts in Cell & Developmental Biology	Semester 1	12.50
ECOL30006 Ecology in Changing Environments	Semester 1	12.50
GENE30005 Human and Medical Genetics	Semester 2	12.50
MIIM30002 Principles of Immunology	Semester 1	12.50
MIIM30011 Medical Microbiology: Bacteriology	Semester 1	12.50
ZOOL30004 Evolution and the Human Condition	Semester 1	12.50

Links to further information:	http://graduate.science.unimelb.edu.au
Related Course(s):	Graduate Diploma in Science