

MOLECULAR BIOLOGY AND BIOTECHNOLOGY

From the 2000 level onwards, Molecular Biology & Biotechnology is offered as a principal subject area. The students who have followed Chemistry as a principal subject area and BIO1012 at the 1000 level are permitted to take Molecular Biology & Biotechnology as a principal subject at 2000 and 3000 levels. Other students who wish to follow selected course units in Molecular Biology & Biotechnology would also be accommodated subject to availability of places. Those students who have completed Molecular Biology & Biotechnology as a principal subject at the 2000 level shall be eligible for selection to an Honours Degree in Molecular Biology & Biotechnology at the end of the second year subjected to their fulfilment of compulsory requirements for the Honours Degree in Molecular Biology & Biotechnology.

2000 LEVEL – MOLECULAR BIOLOGY AND BIOTECHNOLOGY					
Course Code	Course Title	No. of Credits	Pre-requisites	Compulsory	
				Hons.	B.Sc.
MBB2013	Biological Chemistry	3	BIO1012 CHE1013 CHE1023	√	√
MBB2063	Principles of Genetics	3	BIO1012		
MBB2112	Cell and Tissue Culture	2	BIO1012		
MBB2161†	General Microbiology	1	BIO1012	√	
MBB2212	Enzymology	2	BIO1012 CHE1013 CHE1023	√	√
MBB2263	Molecular Genetics	3	BIO1012 CHE1013 CHE1023	√	√
CHE2312	Physical Chemistry I	2	CHE1013 CHE1023	√	
Total		16		11	08

† Available to students who have not offered Biology in GCE (A/L).

3000 LEVEL – MOLECULAR BIOLOGY AND BIOTECHNOLOGY					
Course Code	Course Title	No. of Credits	Pre-requisites	Compulsory	
				Hons.	B.Sc.
MBB3012	Biochemistry and Molecular Biology Laboratory	2	MBB2013 MBB2263	√	√
MBB3063	Recombinant DNA Technology	3	MBB2013 MBB2263	√	√
MBB3113	Molecular Cell Biology	3	MBB2013	√	
MBB3162	Molecular Immunology	2	BIO1012	√	
MBB3222	Molecular Biotechnology	2	MBB2263 MBB3063	√	√
MBB3263	Bioinformatics	3	MBB2263	√	
MBB3312	Fermentation Technology	2	CHE1013 CHE1023		

MBB3332	Molecular Phylogenetics	2	MBB2063 MBB2263	√	
MBB3353	Molecular Virology	3	MBB2263	√	
MBB3372	DNA and Forensic Medicine Laboratory	2	MBB2263	√	
BOT3022	Advanced Microbiology	2			
BOT3042	Plant Pathology	2			
CHE3413	Analytical Chemistry	3	CHE 2312	√	
Total		31		25	07

4000 LEVEL - MOLECULAR BIOLOGY AND BIOTECHNOLOGY				
Course Code	Course Title	No. of Credits	Pre-requisites	Compulsory
				Hons.
MBB4012	Molecular Biology of Plant and Animal Diseases	2	MBB2013 MBB2263	√
MBB4122	Biotechnology Industry	2	MBB3222	√
MBB4162	Environmental Biotechnology	2	MBB2263 MBB3222	√
MBB4413	Special Topics in Cell and Molecular Biology	3	MBB3113	√
MBB4723	Scientific Writing and Research Methodology	3		√
MBB4882	Biosafety Issues in Biotechnology	2	MBB3222	
MBB4893	Quantitative Genomics and Molecular Breeding	3		
MBB4901	Independent Study	1		
MBB4913	Molecular Developmental Biology	3		√
MBB4923	Applications of Nanobiotechnology	3	MBB3222	
MBB4951	Seminar	1		√
MBB4998	Research Project	8		√
SCI4003	Industrial Training	2		
BOT4202	Biological Nitrogen Fixation	2		
ZOO4253	Entomology	3	ZOO3222	
ZOO4262	Developmental Biology	2	ZOO2012	
Total		42		24