Biomedical Science - Master of Medical Science

The Master of Medical Science (MMSc) in Biomedical Science degree is both a vocational and post-graduate studies entry level degree within the health sciences field. Program curriculum allows exploration into a deeper knowledge of core life sciences, while preparing graduates for a future in advanced medical education studies or a career within the healthcare-related biomedical science professions research.

Program Requirements

General Studies Track: 32 credit hours

Code	Title	Credit Hours
Required Courses		
CHM 740	Topics in Organic and Biochemistry	3
MMS 690	General Medical Sciences Capstone	3
PAS 601	Introduction to the Healthcare Professions (Physician Associate)	1
PAS 603	Evidence Based Medicine and Clinical Research	3
PAS 604	Clinical Bioethics and Professional Conduct	1
PAS 611	Pharmacology	2
PAS 612	Introduction to the Human Body and Pathophysiology of Disease--Lecture	4
PAS 623	Immunology and Infectious Disease	3-4
or MBI 515	Immunology Principles and Practice	
12-credits will be accomplished through elective requirements. Required Subgroup Neuro (3-credits); Required Subgroup Molecular (3-Credits); Required Subgroup Public Health/Gerontology (3-credits); Required Subgroup 4 General Science (3-Credits)		12
Total Credit Hours		**32-33**

Leadership Studies Track: 47 credit hours

Code	Title	Credit Hours
Required Courses		
CHM 740	Topics in Organic and Biochemistry	3
FIN 625	Managerial Finance	3
ISA 628	Information Technology and Analytic's Role in the Enterprise	1.5
MGT 610	Strategic Human Capital Management	1.5
MGT 627	Supply Chain and Operations Management	3
MKT 618	Marketing Management	3
MMS 677	Independent Studies	3
MMS 690	General Medical Sciences Capstone	3
PAS 601	Introduction to the Healthcare Professions (Physician Associate)	1
PAS 603	Evidence Based Medicine and Clinical Research	3
PAS 604	Clinical Bioethics and Professional Conduct	1
PAS 611	Pharmacology	2
PAS 612	Introduction to the Human Body and Pathophysiology of Disease--Lecture	4
PAS 623	Immunology and Infectious Disease	3-4
or MBI 515	Immunology Principles and Practice	
12-credits will be accomplished through elective requirements. Required Subgroup Neuro (3-credits); Required Subgroup Molecular (3-Credits); Required Subgroup Public Health/Gerontology (3-credits); Required Subgroup 4 General Science (3-Credits)		12
Total Credit Hours		**47-48**

Elective Courses

Code	Title	Credit Hours
Subgroup 1 - Neuro (3 CREDIT HOURS MINIMUM)		
BIO 552	Neuromodulation:Cells to Circuits	3
BIO 554	Endocrinology	3
BIO 569	Neurophysiology	3
BIO 571	Molecular Physiology	3
Subgroup 2 - Molecular (3 CREDIT HOURS MINIMUM)		
BIO 544	Molecular Biology	3
BIO 564	Laboratory in Cell and Molecular Biology	3
BIO 605	Advanced Molecular Biology	3
BIO 606	Advanced Cell Biology	3
MBI 595	Bacterial Cellular and Developmental Biology	3
CHM 740	Topics in Organic and Biochemistry	3
Subgroup 3 - Public Health/Gerontology (3 CREDIT HOURS MINIMUM)		
KNH 541	Environmental Public Health	3
KNH 562	Public Health Planning and Evaluation	3
KNH 611	Behavioral Approaches to Health Promotion and Education	3
GTY 556	Aging & Health	3
GTY 579	Research on Inequality in Aging & Health	4
GTY 602	Perspectives in Gerontology	3
GTY 667	Policy and Politics of Aging	3
Subgroup 4 - General Science (3 CREDIT HOURS MINIMUM)		
BIO 549	Biology of Cancer	3
MBI 505	Medical Bacteriology	4
MBI 525	Microbial Physiology	4
MBI 564	Human Viruses	3
GTY 608	The Logic of Inquiry	4
GTY 609	Qualitative Research Methods	3