Microbiology Option: Pre-Medical Track

Freshman Year	Credits	
	Fall	Spring
CHMY 141 - College Chemistry I & CHMY 142 - College Chemistry I Lab or CHMY 151 and CHMY 152	4	
BIOB 170IN - Principles of Biological Diversity or BIOH 185 - Integrated Physiology I	4	
STAT 216Q - Introduction to Statistics	3	
Core & Electives	4	
CHMY 143 - College Chemistry II & CHMY 144 - College Chemistry II Lab or CHMY 153 and CHMY 154		4
BIOB 260 - Cellular and Molecular Biology or BIOB 160 - Principles of Living Systems		4
WRIT 101W - College Writing I		3
Core and/or Electives		4
Year Total:	15	15

Sophomore Year	Credits	
	Fall	Spring
BIOM 360 - General Microbiology	5	
CHMY 321 - Organic Chemistry I & CHMY 322 - Organic Chemistry I Lab or CHMY 331 and CHMY 332	4	
BIOH 201 - Human Anatomy and Physiology I	5	
Core and/or Electives	1	
CHMY 323 - Organic Chemistry II & CHMY 324 - Organic Chemistry II Lab or CHMY 333 and CHMY 334		4
BIOH 211 - Human Anatomy and Physiology II		4
M 161Q - Survey of Calculus		4
Core and/or Electives		3
Year Total:	15	15

Junior Year	Credits	
	Fall	Spring
BIOB 375 - General Genetics or BIOH 320 - Biomedical Genetics	3	
BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab or BCH 441 and BCH 442	5	
PHSX 205 - College Physics I	4	
Core	3	
PHSX 207 - College Physics II		4
BIOB 410 - Immunology		3
Core and/or Electives		8
Year Total:	15	15

Senior Year	Credits	
	Fall	Spring
BIOM 450 - Microbial Physiology	3	
BIOM 494 - Seminar/Workshop	1	
R CORE	3	
Recommended Electives	8	
BIOM 494 - Seminar/Workshop		1
BIOM 400 - Medical Microbiology or BIOM 431 - Medical Bacteriology		3
BIOM 410 - Microbial Genetics		3
BIOM 405 - Host-Associated Microbiomes or BIOM 430 - Applied and Environmental Microbiology		3
Recommended Electives		5
Year Total:	15	15
Total Program Credits:		**120**

Microbiology Electives (12 credits required)

BIOH 405	Hematology (F)	3
BIOH 406	Hematology Laboratory	1
BIOM 363	Eukaryotic Cell Biology	3
BIOM 400	Medical Microbiology if not taken as requirement	3
BIOM 405	Host-Associated Microbiomes if not taken as requirement	3
BIOM 427	General Parasitology	4
BIOM 425	Toxicology: Science of Poisons (S)	3
BIOM 431	Medical Bacteriology if not taken as requirement	3
BIOM 435	Virology (F)	3
BIOM 432	Med Bacteriology Lab (S)	2
BIOM 441	Eukaryotic Pathogens (S)	4
BIOM 455R	Research Mthds in Microbiology	0,4
BIOM 457R	Research Methods in Immunology	0,4
BIOM 490R	Undergraduate Research (F,S) max. of 3 cr for major	1-3

Other courses to consider (One of the following can be substituted for a Microbiology Elective)

BIOH 323	Human Developmental Biology (S)	4
BIOB 420	Evolution (S)	3
BIOB 425	Adv Cell & Molecular Biology (S)	3
BIOB 476R	Gene Construction	4
BIOH 303	Global Diseases and Health Disparities	3
BIOH 420	Molecular Genetics	3
BIOH 422	Genes and Cancer	3
BIOH 445	Introduction to Pharmacology	3
BIOH 458	Human Pathophysiology	3
BIOM 419	Programming for Biologists	3
BIOM 491	Special Topics	1-4
NEUR 313	Neurophysiology	3

Other courses to consider that require BIOH 313 as a pre-requisite

NEUR 428R	Molecular Basis of Neurological Diseases	3
BIOH 435	Cognitive Neuroscience	3
NEUR 425	Sensory Neurophysiology	3
NEUR 430	Neuroethology	3
NEUR 440	Neuroscience of Mental Illness	3
NEUR 444	Modeling Brain Disorders	3
NEUR 455	Molecular Medicine	3

Recommended University Core & Electives for MCAT exam		
SOCI 101IS	Introduction to Sociology (F,S)	3
PSYX 100IS	Intro to Psychology (F,S,Su)	4

A minimum of 120 credits is required for graduation; 42 of those credits must be in courses numbered 300 and above.