Microbiology Major Bachelor of Science

FIRST YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Req	Title	Crs	Subj/Course	Title	Credits
Biology 105	Biological Concepts: Unity	4	Biol 111	Biology Orientation	2
Math	Math 108	5	Biol 106	Biological Concepts-Diversity	4
Chem 105	General Inorganic I	5	Chem 106	General Inorganic II	5
GEN ED	WBIS 188	3	GEN ED	Physical Education 105	2
			Math 171	Calculus I	4
TOTAL		17	TOTAL		17

SECOND YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Course	Title	Credits	Subj/Course	Title	Credits
Biol 309	Bacteriology	5	Biol 323	Introduction to Molecular and Cell Biology	3
Chem 235	Organic I	4	Chem 335	Organic II	4
GEN ED	Communication 111	3	GEN ED	(HU) Humanities Course - Fine Arts	3
Physics 107	General Physics	5	GEN ED	(NW)Non-Western Culture Course	3
			GEN ED	(SS)Social Science-History	3
TOTAL		17	TOTAL		16

THIRD YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Course	Title	Credits	Subj/Course	Title	Credits
Biol 341	Immunology	4	Biol 389+390**	Biotechnology Lecture/Lab or	5
Bio 375+377	Microbial Genetics/Lecture and Lab	5	Biol	Electives	3-5
Biol	Electives	3-5	GEN ED	(HU)Humanities Course - Phil/Rel Stds	3
Biol 327	Microbial Ecology and Diversity	3	GEN ED	(ES)Ethnic Studies Course	3
Chem 303	Biochem I	3	GEN ED	Advanced Composition	3
TOTAL		18-20	TOTAL		17-19

FOURTH YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Course	Title	Credits	Subj/Course	Title	Credits
Biol 374	Cell Immunology Lab	2	Biol 389+390*	Biotechnology/Lecture and Lab or	5
Biol 450	Microbial Physiology	5	Biol	Electives	3-5
Biol	Electives	3-5	GEN ED	(HU) Humanities Course - Literature	3
GEN ED	(SS) Social Science Course	3	GEN ED	(HU) Humanities Course - Choice	3
GEN ED	(SS) Social Science	3	GEN ED	(SS) Social Science	3
			Biol 491	Senior Survey	0
TOTAL		16-18	TOTAL		17-19

BS GEN ED Requirements are as follows: (letters in parentheses are the GEN ED designations for each area)

Communications: Comm 111: 3 crs

English Composition (EN):6 (WBIS 188 plus one Advanced Composition Course)

Humanities (HU):12 (1 course must be a literature course; other courses must be from two out of remaining three Humanities areas.

Mathematics (MA): 3 crs (additional credits may be required for remedial coursework to reach minimum level)

Natural Science (NS): four courses total: see catalog or academic advisor for more details.

Non-Western Culture (NW): 3 crs Physical Education (PE): 2 crs

Social Science (SS):12 (one course must be in History)

^{*} Note: Total number of GEN ED credits required for BS varies as some courses count in more than one area

^{*} If semester falls on an even yr ** If semester falls on an odd yr

^{***}Note: Students must take two of the following upper level lecture/lab combinations: 341/374. 375/377; 389/390