Biomedical Sciences (2012-2013)

Microbiology Emphasis

This is a **general curriculum** guide and is not applicable to every student.

You must consult with your advisor early to ensure correct course selection!

-Assumes that the MTH 110 prerequisite has been fulfilled-

Fall Semester –Year One		credits	Winter Semester – Year One		credits
BIO 120: General Biology I (Gen Ed)		4	CHM 116: Principles of Chemistry II		5
CHM 115 Principles of Chemistry I (Gen Ed)		5	WRT 150: Strategies in Writing		4
MTH 122: College Algebra (Gen Ed)		3	MTH 123: Trigonometry		3
Gen Ed.		3	Gen Ed.		3
	Total	15		Total	15
Fall Semester – Year Two		credits	Winter Semester – Year Two		credits
BIO 375/376: Genetics/Genetics Lab <i>OR</i>		4	BMS 212/213: Introductory Microbiology		4
BIO 355: Human Genetics		3	CHM 242: Organic Chemistry II		4
BMS 208: Human Anatomy		3	STA 215: Introductory Applied Statistics		3
CHM 241: Organic Chemistry I		4	Gen Ed.		3
Gen Ed.		3			
	Total	13-14		Total	14
Fall Semester – Year Three		credits	Winter Semester – Year Three		credits
BMS 290/291 Human Physiology w/ Lab		4	CHM 461: Biochemistry I OR		4
PHY 220: General Physics I ⁴		5	CHM 232: Biological Chemistry		4
BMS 322/323: Bacterial Physiology w/Lab ²		4	PHY 221: General Physics II ⁴		5
Gen Ed. or Theme		3	Gen Ed.		3
			Elective		3
	Total	16*		Total	15*
Fall Semester – Year Four		credits	Winter Semester – Year Four		credits
BMS 312/313: Bacterial Genetics w/Lab ³		4	BMS 499: Research in Biomedical Sciences		1-3
Major elective ¹		3	Major elective ¹		3
Elective		3	Elective		3
Gen Ed. or Theme		3	Elective		3
Gen Ed. or Theme		3	Gen Ed. or Theme		3
	Total	16*		Total	15

*The block tuition rate is for 12-15 credits. You will pay additional tuition for any credits over 15.

Notes:

¹ A minimum of 6 hours must be taken from the following: BIO 414: Molecular Biology of the Gene; BMS 410: Immunology; BMS 411: Immunology Lab; BMS 412: Medical Bacteriology; BMS 413: Medical Bacteriology Lab; BMS 431 Medical Virology; CHM 462: Techniques in Biochemistry.

Special Notes:

- A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP, IB or CLEP credit. For students without high school chemistry, CHM 109 is strongly encouraged.
- B. Courses that have (*Gen Ed*) written after them are classes that are required in the major and also fulfill a section of the general education program.
- C. Students must complete a total of two courses with an SWS attribute.

² Offered Fall semesters of odd-numbered years. Does NOT have to be taken before BMS 312/313.

³ Offered Fall semesters of even-numbered years. Does NOT have to be taken after BMS 322/323.

⁴Physics 220/221 may be taken in the senior year if student is not pre-professional (medical, dental, etc.)