

# Biomedical Sciences (2011-2012)

## 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!**

**-Student needs MTH 110 prerequisite-**

Fall Semester – Year One	credits	Winter Semester – Year One	credits
BIO 120: General Biology I ( <i>Gen Ed</i> )	4	CHM 115: Principles of Chemistry I ( <i>Gen Ed</i> )	5
MTH 110: Algebra	4	MTH 122: College Algebra ( <i>Gen Ed</i> )	3
WRT 150: Strategies in Writing	4	BMS 208: Human Anatomy	3
Gen Ed.	3	Gen Ed.	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>14</b>
Fall Semester – Year Two	credits	Winter Semester – Year Two	credits
BIO 355: Human Genetics <b>OR</b>	3	CHM 241: Organic Chemistry I	4
BIO 375/376: Genetics/ Genetics Lab	4	BMS 212/213: Introductory Microbiology	4
CHM 116: Principles of Chemistry II	5	STA 215: Introductory Applied Statistics	3
MTH 123: Trigonometry	3	Gen Ed.	3
Gen Ed.	3		
<b>Total</b>	<b>14-15</b>	<b>Total</b>	<b>14</b>
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
CHM 242: Organic Chemistry II	4	CHM 232: Biological Chemistry <b>OR</b>	4
PHY 220: General Physics I	5	CHM 461: Biochemistry	4
BMS 322/323: Bacterial Physiology w/Lab <sup>2</sup>	4	BMS 290/291: Human Physiology w/Lab	4
Gen Ed. or Theme	3	PHY 221: General Physics II	5
		Gen Ed.	3
<b>Total</b>	<b>16*</b>	<b>Total</b>	<b>16*</b>
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
BMS 312/313: Bacterial Genetics w/Lab <sup>3</sup>	4	BMS 499: Research in Biomedical Sciences	1-3
Major elective <sup>1</sup>	3	Major elective <sup>1</sup>	3
Elective	3	Elective	3
Gen Ed. or Theme	3	Elective	3
Gen Ed. or Theme	3	Gen Ed. or Theme	3
<b>Total</b>	<b>16*</b>	<b>Total</b>	<b>15</b>

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

### Notes:

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

<sup>2</sup> Offered Fall semester of odd-numbered years.

<sup>3</sup> Offered Fall semester of even-numbered years.

### Special Notes:

A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP or CLEP credit.

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. Complete a total of two courses with an SWS attribute. The two SWS courses may not be taken from the same department or school. One must be from outside the student's major unit.

**It is imperative to meet with your faculty advisor or an advisor in the CLAS Academic Advising Center early in your career.**

**The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.**

Online at: <http://www.gvsu.edu/clasadvising>

Prepared by CLAS Academic Advising Center – 3/8/2011