

**BIOMEDICAL SCIENCES-BS-NUTRITION SCIENCES EMPHASIS**THIS IS A **GENERAL** CURRICULUM GUIDE AND IS NOT APPLICABLE TO EVERY STUDENT. IT IS IMPORTANT TO MEET WITH YOUR ADVISOR.

Year One			
<b>BIO 120</b> General Biology I Prerequisites: High school chemistry, CHM 109, or CHM 115 strongly recommended (CHM 109 or 115 may be taken concurrently)	4 (6)	<b>BMS 105</b> Basic Nutrition	3
<b>CHM 115</b> Principles of Chemistry I Prerequisites: High school chemistry and (MTH 110 or MTH 122 or MTH 125 or MTH 201)	4 (6)	<b>CHM 116</b> Principles of Chemistry II Prerequisites: CHM 115 and (MTH 122 or MTH 125 or MTH 201)	5 (7)
<sup>3</sup> <b>MTH 122</b> College Algebra Prerequisite: MTH 110 or assignment through Grand Valley math placement	3	<b>STA 215</b> Introductory Applied Statistics Prerequisite: MTH 110 or equivalent	3
Gen Ed	3	<b>WRT 150</b> Strategies in Writing	4
Elective	1		
<i>Numbers noted within (parentheses) are contact hours</i>	<i>Total</i>	<i>Total</i>	<i>Total</i>
	15		15
Year Two			
<b>BMS 208</b> Human Anatomy Prerequisite: BIO 120 or BMS 202	3	<b>BMS 290</b> Human Physiology Prerequisites: BMS 208 and two semesters of chemistry	3
<b>CHM 241</b> Organic Chemistry for Life Sciences I (Changing to 5 credits in fall 2015) Prerequisite: CHM 116	4 (6)	<b>BMS 291</b> Laboratory in Human Physiology Prerequisite: BMS 290 or concurrent registration	1 (3)
<sup>3</sup> <b>MTH 123</b> Trigonometry Prerequisite: MTH 122 or assignment through Grand Valley math placement (MTH 122 may be taken concurrently)	3	<sup>4</sup> <b>BMS</b> Elective Course	3
Gen Ed	3	<b>CHM 242</b> Organic Chemistry for Life Sciences II Prerequisite: CHM 241	4 (6)
Gen Ed	3	Gen Ed	3
<i>Total</i>	<i>Total</i>	<i>Total</i>	<i>Total</i>
	16		14
Year Three			
<b>BMS 301</b> Introduction to Research in Biomedical Sciences Prerequisites: STA 215 and sophomore standing	3	<b>BMS 212</b> Introductory Microbiology Prerequisites: BIO 120 and (CHM 230 or CHM 232 or CHM 241)	3
<b>CHM 232</b> Biological Chemistry Prerequisite: CHM 231 or 242	4 (7)	<b>BMS 213</b> Laboratory in Microbiology Prerequisite: BMS 212 or concurrent enrollment	1 (4)
<b>OR CHM 461</b> Biochemistry I Prerequisite: CHM 242 or CHM 247 and CHM 248	4	<b>PHY 221</b> General Physics II Prerequisite: PHY 220	5 (7)
<b>PHY 220</b> General Physics I Prerequisites: MTH 122 and MTH 123	5 (7)	Gen Ed	3
<sup>4</sup> <b>BMS</b> Elective Course	3	Gen Ed	3
<i>Total</i>	<i>Total</i>	<i>Total</i>	<i>Total</i>
	15		15
Year Four			
<b>BIO 375</b> Genetics/ <b>BIO 376</b> Genetics Laboratory Prerequisites: BIO 120. Concurrent enrollment in BIO 376 is required ( <i>Recommended for pre-med students</i> )	3/1 (6)	<sup>4</sup> <b>BMS</b> Elective Course	3
<b>OR BIO 355</b> Human Genetics (lecture only) Prerequisite: BIO 120 or BIO 103, or permission of instructor	3	Issue	3
<sup>2</sup> <b>BMS 495</b> Concepts in Wellness (Capstone) SWS Prerequisites: BMS 208, BMS 212, BMS 290 or 291, and senior standing	3	Gen Ed	3
<sup>4</sup> <b>BMS</b> Elective Course	3	<sup>1</sup> Elective	3
Gen Ed	3	<sup>1</sup> Elective	3
Issue	3		
<i>Total</i>	<i>Total</i>	<i>Total</i>	<i>Total</i>
	15-16*		15

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

<sup>1</sup> Elective refers to any course that will help you earn the required 120 credits to graduate<sup>2</sup> Students must complete a total of two courses with an SWS attribute<sup>3</sup> For students with the Advanced Waiver/Override for Mathematics based on ACT scores, it is **STRONGLY RECOMMENDED** that proficiency in MTH 123 – Trigonometry – be demonstrated by either taking the MTH 123 course or by achieving a passing score on the GVSU math

placement test **PRIOR** to taking PHY 220 and 221. Students who have AP/IP/dual enrollment credit for MTH 201 (Calculus I), or complete the MTH 122 and 123 proficiency tests, only need to complete STA 215. **To take the Math Proficiency Tests online, visit this link: [gvsu.edu/s/jk](http://gvsu.edu/s/jk)**  
<sup>4</sup>Students must choose 4 out of the 5 following Nutrition elective courses: BMS 305 - Clinical Nutrition, BMS 306 - Advanced Human Nutrition, BMS 404 Community Nutrition, BMS 407 - Nutrition in the Life Cycle, BMS 415 - Nutrition and Physical Performance. See below for a suggested pattern of the Nutrition electives:

	Fall	Winter
<b>Year 1</b>	BMS 105	
<b>Year 2</b>		BMS 404
<b>Year 3</b>	BMS 407	BMS 305 or BMS 404 or BMS 415
<b>Year 4</b>	BMS 305, or BMS 306, or BMS 407	BMS 404 or BMS 415

**Declaring the BMS Major with Nutrition Emphasis:**

1. In myBanner, select "Student" > "Student Records" > "Change Major" > "Change Major 1/Program"
2. Choose "Biomedical Science-BS Nutrition" from the drop-down box.
3. Click "Submit" and then "Change to New Program"
4. Declare "**Pre-Med**" as your SECOND MAJOR if you are planning on medical, dental, pharmacy, or optometry school.  
 →If you are Pre-Veterinary, the **Biology with Pre-Veterinary emphasis** is recommended

**General Education Overlap**

<b>General Education Categories fulfilled by the Biomedical Sciences Major:</b>	
Life Sciences with Lab: BIO 120	Physical Sciences with Lab: CHM 115
Mathematical Sciences: STA 215, MTH 122, MTH 123	
<b>Additional Overlap for Pre-Professional Students</b>	
Social and Behavioral Sciences: PSY 101	Social and Behavioral Sciences: SOC 205
U.S. Diversity: SOC 205	

**Pre-Professional Students**

(Pre-Chiropractic, Pre-Dental, Pre-Medical, Pre-Optometry, Pre-Pharmacy, Pre-Podiatry, & Pre-Veterinary)

**Keep in mind that you may major in anything so long as you complete the pre-requisites for your professional program.**

**The AAMC has approved changes to the MCAT exam starting in March 2015 that will add emphasis on the social and behavioral sciences, scientific inquiry and reasoning skills, and introductory biochemistry.**

It is imperative to meet with your faculty advisor and an advisor in the CLAS Academic Advising Center regularly.

The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585  
<http://www.gvsu.edu/clasadvising> (Also find us on Orgsync, Facebook, and Twitter!)

**Pre-Professional Advisors:**

**Jo Ann Litton**  
 littonj@gvsu.edu

**Julie Amon**  
 amonju@gvsu.edu

See <http://gvsu.edu/s/zY> for additional details regarding professional school information.