# BIOMEDICAL SCIENCES-BS-NUTRITION SCIENCE EMPHASIS

THIS IS A GENERAL CURRICULUM GUIDE AND IS NOT APPLICABLE TO EVERY STUDENT. IT IS IMPORTANT TO MEET WITH YOUR ADVISOR.

	Yea	r One	
<sup>1</sup> BIO 120 General Biology I (GE Life Science)	4 (6)	BMS 208 Human Anatomy	3
Prerequisites: High school chemistry, CHM 109, or CHM 115		Prerequisite: BIO 120	
strongly recommended (CHM 109 or 115 may be taken		CHM 116 Principles of Chemistry II	5 <i>(7)</i>
concurrently)		Prerequisites: CHM 115 and (MTH 122 or MTH 125 or MTH	
<b>CHM 115</b> Principles of Chemistry I (GE Physical Science)	4 (6)	201)	
Prerequisites: High school chemistry and (MTH 110 or MTH		STA 215 Introductory Applied Statistics (GE Math)	3
122 or MTH 125 or MTH 201)		Prerequisite: MTH 110 or equivalent	
<sup>2</sup> MTH 122 College Algebra	3	OR	
Prerequisite: MTH 110 or assignment through Grand Valley		BMS 105 Basic Nutrition	3
math placement		<sup>3</sup> WRT 130 or WRT 150 Strategies in Writing (GE Writing)	3-4
Gen Ed (GE Art) or <sup>3</sup> WRT 120 (self-placement)	3	<sup>4</sup> Elective (if needed)	1
<sup>4</sup> Elective	1		
Numbers noted within (parentheses) are contact hours Total	15	Total	15
	Year	Two	
BMS 290 Human Physiology	3	BMS 391 Laboratory in Human Physiology	2 (3)
Prerequisites: BMS 208 and two semesters of chemistry		Prerequisite: BMS 290 or 251 and two semesters of chemistry	
CHM 241 Organic Chemistry for Life Sciences I	5 <i>(7)</i>	CHM 242 Organic Chemistry for Life Sciences II	4 (6)
Prerequisite: CHM 116		Prerequisite: CHM 241	
BMS 105 Basic Nutrition	3	<sup>2</sup> MTH 123 Trigonometry	3
OR		Prerequisite: MTH 122 or assignment through Grand Valley	
STA 215 Introductory Applied Statistics (GE Math)	3	math placement (MTH 122 may be taken concurrently)	
Gen Ed (GE Philosophy & Literature)	3	Gen Ed (GE Social/Behavioral)	3
<sup>4</sup> Elective	1	Gen Ed (GE US Diversity)	3
Total	15	Total	15
	Year	Three	
CHM 461 Biochemistry I	4	BMS 212 Introductory Microbiology	3
Prerequisite: CHM 242 or CHM 247 and CHM 248		Prerequisites: BIO 120 and (CHM 116, 230, or 231)	
PHY 220 General Physics I	5 <i>(7)</i>	BMS 213 Laboratory in Microbiology	1 (4)
Prerequisites: MTH 122 and MTH 123		Prerequisite: BMS 212 or concurrent enrollment	
<sup>5</sup> BMS Nutrition Elective	3	PHY 221 General Physics II	5 <i>(7)</i>
<sup>6</sup> Gen Ed (SWS) (GE Historical Analysis)	3	Prerequisite: PHY 220	
		<sup>5</sup> BMS Nutrition Elective	3
		Gen Ed (GE Social/Behavioral)	3
Total	15	Total	15
	1	Four	
BIO 375 Genetics/BIO 376 Genetics Laboratory	3/1(6)	<sup>5</sup> BMS Nutrition Elective	3
BIO 375 Prerequisites: BIO 120 or CMB 155 and 156		Issue	3
BIO 376 Prerequisites: BIO 375 or 355 (either may be taken		Gen Ed (if remaining) or <sup>4</sup> Elective	3
concurrently)		<sup>4</sup> Elective	3
OR BIO 355 Human Genetics (lecture only)	3	<sup>4</sup> Elective	3
Prerequisite: BIO 120 or BIO 104, or permission of instructor			
<sup>6</sup> BMS 495 Concepts in Wellness (Capstone) <i>SWS</i>	3		
Prerequisites: BMS 208, BMS 212, BMS 290 or 391, and senior			
standing			
<sup>5</sup> BMS Nutrition Elective	3		
Gen Ed (GE Global Perspectives)	3		
Issue	3		
Total	15-16*	Total	15

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

<sup>&</sup>lt;sup>1</sup>CMB 155+156 can substitute for BIO 120 for those students interested in research.

<sup>&</sup>lt;sup>2</sup> Students starting below MTH 122 should consult with an advisor about summer courses to stay on track for a 4-year graduation. For students with the Advanced Waiver for Mathematics based on ACT/SAT 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/IB/dual enrollment credit for MTH 201 (Calculus I), or pass the MTH 122 and 123 proficiency tests, only need to complete STA 215. MTH 124 and MTH 201 will substitute for MTH 122 and MTH 123. **To take the Math Proficiency Tests online, visit this link:** gvsu.edu/s/mv

<sup>3</sup>Students who self-place into WRT 120 should take this course in the fall semester and then take WRT 130 in the winter semester of their first year. Students will not need to take WRT 150 if they have earned credit for the course through AP/Dual Enrollment. A grade of C or better is required in WRT 130 or 150 in order to satisfy the WRT requirement at GVSU.

<sup>4</sup> Students must have a **minimum of 120 credits** to graduate with **58 of the 120 credits** being from a senior level institution and the **final 30 of the 120 credits** completed at GVSU. Elective refers to any course that will help meet these requirements.

<sup>5</sup>Students must choose **4 out of the 5** following Nutrition elective courses. Courses not offered every semester, see Banner for details.

**BMS 304** - Community Nutrition. Prerequisites: BMS 105 and junior standing. *Sophomores may request an override to the junior standing prerequisite, which may be considered on a case-by-case basis.* 

BMS 305 - Clinical Nutrition. Prerequisites: BMS 290 or BMS 251 and (CHM 232 or CHM 230 or CHM 461).

BMS 306 - Advanced Human Nutrition. Prerequisites: BMS 290 or MOV 304, and CHM 232 or CHM 461.

BMS 407 - Nutrition in the Life Cycle. Prerequisites: BMS 105 or 305 or 306; and either BMS 290/391 or BMS 251.

BMS 415 - Nutrition and Physical Performance. Prerequisites: BMS 251 or BMS 290; and CHM 232 or CHM 461.

<sup>6</sup>Students must complete a total of two courses with an SWS attribute

## **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 "PreProfessional Preparation" as your SECOND MAJOR if you are planning on medical/podiatry, dental, pharmacy, or optometry school.

## **General Education Overlap**

General Education Categories fulfilled by the Biomedical Sciences Major:		
Life Sciences with Lab: BIO 120	Physical Sciences with Lab: CHM 115	
Mathematical Sciences: STA 215, MTH 122, MTH 123		
Additional Overlap for Preprofessional Students		
Social and Behavioral Sciences: PSY 101 and SOC 101		

## The CLAS Academic Advising Center is located in C-1-120 MAK, 616-331-8585

#### **Preprofessional Students**

(Prechiropractic, Predental, Premedical, Preoptometry, Prepharmacy, Prepodiatry, & Preveterinary)

Keep in mind that you may major in anything so long as you complete the prerequisites for your professional program.

To schedule an appointment with a Microbiology and/or Preprofessional Advisor in the CLAS Academic Advising Center, visit <a href="https://www.gvsu.edu/clasadvising">www.gvsu.edu/clasadvising</a> and click on "Schedule Appointment"

## Follow us on Social Media!

Facebook: Grand Valley CLAS Academic Advising Center (@gvsuclasadvising)

**YouTube:** GVSU Preprofessional Programs **Instagram:** @gvsupreprofessionaladvising

To find more information on Preprofessional programs, visit www.gvsu.edu/clasadvising/preprofessional