

# 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.

| Year One   |               |   |           |
|--|---------------|---|-----------|
| <sup>1</sup> <b>BIO 120</b> General Biology I (GE Life Science)<br>Prerequisites: High school chemistry, CHM 109, or CHM 115 strongly recommended (CHM 109 or 115 may be taken concurrently) | 4 (6)         | <b>BMS 208</b> Human Anatomy<br>Prerequisite: BIO 120   | 3         |
| <b>CHM 115</b> Principles of Chemistry I (GE Physical Science)<br>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<br>Prerequisites: CHM 115 and (MTH 122 or MTH 125 or MTH 201)   | 5 (7)     |
| <sup>2</sup> <b>MTH 122</b> College Algebra<br>Prerequisite: MTH 110 or assignment through Grand Valley math placement   | 3             | <b>STA 215</b> Introductory Applied Statistics (GE Math)<br>Prerequisite: MTH 110 or equivalent   | 3         |
| Gen Ed (GE Art) or <sup>3</sup> <b>WRT 120</b> (self-placement)  | 3             | OR  |           |
| <sup>4</sup> Elective  | 1             | <b>BMS 105</b> Basic Nutrition  | 3         |
|  |               | <sup>3</sup> <b>WRT 130</b> or <b>WRT 150</b> Strategies in Writing (GE Writing)  | 3-4       |
|  |               | <sup>4</sup> Elective (if needed)   | 1         |
| <i>Numbers noted within (parentheses) are contact hours</i> <b>Total</b>   | <b>15</b>     | <b>Total</b>  | <b>15</b> |
| Year Two   |               |   |           |
| <b>BMS 290</b> Human Physiology<br>Prerequisites: BMS 208 and two semesters of chemistry   | 3             | <b>BMS 391</b> Laboratory in Human Physiology<br>Prerequisite: BMS 290 or 251 and two semesters of chemistry  | 2 (3)     |
| <b>CHM 241</b> Organic Chemistry for Life Sciences I<br>Prerequisite: CHM 116  | 5 (7)         | <b>CHM 242</b> Organic Chemistry for Life Sciences II<br>Prerequisite: CHM 241  | 4 (6)     |
| <b>BMS 105</b> Basic Nutrition   | 3             | <sup>2</sup> <b>MTH 123</b> Trigonometry<br>Prerequisite: MTH 122 or assignment through Grand Valley math placement (MTH 122 may be taken concurrently) | 3         |
| OR   |               |   |           |
| <b>STA 215</b> Introductory Applied Statistics (GE Math)   | 3             | Gen Ed (GE Social/Behavioral)   | 3         |
| Gen Ed (GE Philosophy & Literature)  | 3             | Gen Ed (GE US Diversity)  | 3         |
| <sup>4</sup> Elective  | 1             |   |           |
| <b>Total</b>   | <b>15</b>     | <b>Total</b>  | <b>15</b> |
| Year Three   |               |   |           |
| <b>CHM 461</b> Biochemistry I<br>Prerequisite: CHM 242 or CHM 247 and CHM 248  | 4             | <b>BMS 212</b> Introductory Microbiology<br>Prerequisites: BIO 120 and (CHM 116, 230, or 231)   | 3         |
| <b>PHY 220</b> General Physics I<br>Prerequisites: MTH 122 and MTH 123   | 5 (7)         | <b>BMS 213</b> Laboratory in Microbiology<br>Prerequisite: BMS 212 or concurrent enrollment   | 1 (4)     |
| <sup>5</sup> BMS Nutrition Elective (BMS 407 see reverse)  | 3             | <b>PHY 221</b> General Physics II<br>Prerequisite: PHY 220  | 5 (7)     |
| <sup>6</sup> Gen Ed (SWS) (GE Historical Analysis)   | 3             | <sup>5</sup> BMS Nutrition Elective (BMS 304, 305 or 415 see reverse)   | 3         |
|  |               | Gen Ed (GE Social/Behavioral)   | 3         |
| <b>Total</b>   | <b>15</b>     | <b>Total</b>  | <b>15</b> |
| Year Four  |               |   |           |
| <b>BIO 375</b> Genetics/ <b>BIO 376</b> Genetics Laboratory<br>BIO 375 Prerequisites: BIO 120 or CMB 155 and 156<br>BIO 376 Prerequisites: BIO 375 or 355 (either may be taken concurrently) | 3/1(6)        | <sup>5</sup> BMS Nutrition Elective (BMS 304, 305, or 415 see reverse)  | 3         |
| <b>OR BIO 355</b> Human Genetics (lecture only)<br>Prerequisite: BIO 120 or BIO 104, or permission of instructor   | 3             | Issue   | 3         |
| <sup>6</sup> <b>BMS 495</b> Concepts in Wellness (Capstone) SWS<br>Prerequisites: BMS 208, BMS 212, BMS 290 or 391, and senior standing  | 3             | Gen Ed (if remaining) or <sup>4</sup> Elective  | 3         |
| <sup>5</sup> BMS Nutrition Elective (BMS 305 or 306, see reverse)  | 3             | <sup>4</sup> Elective   | 3         |
| Gen Ed (GE Global Perspectives)  | 3             | <sup>4</sup> Elective   | 3         |
| Issue  | 3             |   |           |
| <b>Total</b>   | <b>15-16*</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.

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

<sup>2</sup> Students who have AP/IB/dual enrollment credit for MTH 201 (Calculus I), or complete the MTH 122 and 123 proficiency tests, only need to complete STA 215. MTH 124 will substitute for MTH 122 and MTH 123.

**To take the Math Proficiency Tests online, visit this link: [gvsu.edu/s/mv](https://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:

**BMS 304** - Community Nutrition: Offered winter semester. 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: Offered fall and winter semesters. Prerequisites: BMS 290 or BMS 251 and (CHM 232 or CHM 230 or CHM 461).

**BMS 306** - Advanced Human Nutrition: Offered fall and summer semester. Prerequisites: BMS 290 or MOV 304, and CHM 232 or CHM 461.

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

**BMS 415** - Nutrition and Physical Performance: Offered winter and summer semesters. 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**

| <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 Preprofessional Students</b>                          |                                     |
| Social and Behavioral Sciences: PSY 101 and SOC 101                             |                                     |

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

**<http://www.gvsu.edu/clasadvising> (Also find us on Facebook and Twitter!)**

#### **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 Biomedical Sciences and/or Preprofessional Advisor in the CLAS Academic Advising Center, visit [www.gvsu.edu/clasadvising](http://www.gvsu.edu/clasadvising) and click on "Schedule Appointment"

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**YouTube:** GVSU Preprofessional Programs

**Instagram:** @gvsupreprofessionaladvising

To find more information on Preprofessional programs, visit [www.gvsu.edu/clasadvising/preprofessional](http://www.gvsu.edu/clasadvising/preprofessional)