

EXERCISE SCIENCE – BS – EXERCISE SCIENCE IN HEALTHCARE EMPHASIS

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

Sample Four-Year Plan

Year One			
BIO 120 - General Biology I (Gen Ed - Life Science w/Lab)	4	BMS 250 - Anatomy & Physiology I*	4
WRT 150 - Strategies in Writing (Gen Ed Writing)	4	Prerequisite: BIO 120	
EXS 195 - Introduction to Exercise Science	3	BMS 105 - Basic Nutrition	3
MTH 110 - Algebra		CHM 109 – Introductory Chemistry (Gen Ed – Physical Science)	4
Prerequisite: GVSU placement test	4	PSY 101 - Introductory Psychology (Gen Ed Social Behavioral Science #1)	3
<i>Total</i>	<i>15</i>	<i>Total</i>	<i>14</i>
Year Two			
BMS 251 - Anatomy & Physiology II*	4	MOV 304 - Introduction to Exercise Physiology	3
Prerequisite: BMS 250		Prerequisite: BMS 251	
CHM 234- Introductory Biochemistry [Emphasis]	4	EXS 209 - Evidence-Based Practice in Exercise Science	3
Prerequisite: CHM 109		Prerequisite: STA 215	
EXS 220 - Exercise Instruction & Leadership	3	MOV 300 - Kinesiology	3
Prerequisite: EXS 195		Prerequisite: BMS 250	
STA 215 - Introductory Applied Statistics (Gen Ed - Mathematical Science)	3	Gen Ed – Social Behavioral Science #2	3
Prerequisite: MTH 110 or equivalent		BMS 223 - Infectious Human Disease [Emphasis]	3
ATH 217 - Modern Principles of Athletic Training	2		
<i>Total</i>	<i>16</i>	<i>Total</i>	<i>15</i>
Year Three			
EXS 320 - Exercise Testing & Prescription	3	EXS 470 - Exercise for Special Populations	3
Prerequisite: MOV 304; EXS 322 is a co-requisite		Prerequisite: EXS 320/322	
EXS 322 - Exercise Testing Lab	2	Gen Ed - Historical Analysis	3
Prerequisite: MOV 304; EXS 320 is a co-requisite		Emphasis Elective # 2 (see list on back)	3
PHY 200 Physics for Life Sciences [Emphasis] or PHY 220	4		
Gen Ed – The Arts	3	Emphasis Elective # 3 (see list on back)	3
Emphasis Elective # 1 (see list on back)	3	BIO 328 - Biomedical Ethics (Issues#1/SWS#1)- [Emphasis]	3
<i>Total</i>	<i>15</i>	<i>Total</i>	<i>15</i>
Year Four			
EXS 495 - Professionalism in Exercise Science (SWS#2)	3	EXS 490 - Internship in Exercise Science	6-12
Prerequisite: EXS 320/322, Senior Standing		Prerequisite: EXS 320/322, Senior standing	
Gen Ed - U.S. Diversity	3	Gen Ed – Global Perspectives	3
Emphasis Elective # 4 (see list on back)	3	Free Elective – if needed	3
Issues # 2	3	Free Elective – if needed	3
Gen Ed – Philosophy & Literature	3		
<i>Total</i>	<i>15</i>	<i>Total</i>	<i>15</i>

The block tuition rate is for 12-15 credits. You will pay additional tuition for more than 15 credits.

Students who place into preparatory levels of Math or Writing will take a two-semester version of this requirement | MTH 108 & MTH 109 | WRT 120 & 130
Courses **bolded** are required to be taken in the sequence as they have been listed in this guide and each course requires the previous to be complete

Graduation Requirements

- Earn 120 credit hours at minimum of 2.0 GPA – 58 credit hours at 4-yr institution and last 30 credit hours at GVSU;
- Complete all components of the General Education program, including two Issues courses;
- Complete two supplemental writing skills (SWS) courses after WRT 150 with minimum C grade.

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-1-120 and C-1-140 MAK, 616-331-8585. Online at: <http://www.gvsu.edu/clasadvising>

This emphasis provides a logical gateway for graduate health profession-seeking students (athletic training, physical therapy, occupational therapy, and physician assistant) by broadening their basic biological and physical science background. This emphasis is intentionally diverse in electives to accommodate the wide range of graduate health profession pre-requisite coursework not already offered within the Exercise Science core curriculum.

*Students may wish to take BMS 208 (Human Anatomy), BMS 290 (Human Physiology), and BMS 391 (Laboratory in Human Physiology) to substitute for BMS 250 (Anatomy and Physiology I) and BMS 251 (Anatomy of Physiology II). BMS 208, BMS 290 and BMS 391 may be a better preparation for a Doctor of Physical Therapy program and is the preferred A & P sequence of the DPT program at GVSU. If a student elects to take BMS 250 & 251 and plans to apply to the GVSU DPT program, it is strongly recommended that they also take BMS 309 and 355.

Declaring the Exercise Science Major with the Health Care emphasis:

1. Log into myBanner from the GVSU homepage
2. Once logged in select "Student," "Student Records," and then "Change Major"
3. Click on the "Change Major 1/Program" box
4. Click on the down arrow in the box next to "New Major 1/Program," from here scroll down and choose "Exercise Science-BS Health Professions Prep"
5. Click "Submit" and then "Change to New Program"
6. Repeat the process to declare "Health Professions Graduate Preparation" if you are pursuing a degree in Physical Therapy, Athletic Training, Physician Assistant, or any other College of Health Professions graduate programs.

General Education Overlap

General Education Categories fulfilled by the Major:	
Mathematical Sciences: STA 215	Social and Behavioral Sciences: PSY 101
Life Sciences: BIO 120	Physical Sciences: CHM 109

Emphasis Elective Choices – Must choose 12 credits | Work with your advisors to select electives that align with your professional goals.

ATH 210: Directed Observation in AT (1 credit)

ATH 218: Modern Principles of Athletic Training Lab (1 credit) – *Prerequisite: ATH 217, may be taken concurrently*

BIO 355: Human Genetics (3 credits) – *Prerequisite: BIO 120 or 104*

BMS 212: Introductory Microbiology (3 credits) – *Prerequisite: BIO 120 and one of (CHM 127 and CHM 128), or CHM 234, or CHM 231*

BMS 213: Laboratory in Microbiology (1 credit) – *Prerequisite: BMS 213, may be taken concurrently*

BMS 305: Clinical Nutrition (3 credits) – *Prerequisite: BMS 290 or BMS 251 and (CHM 232 or CHM 230 or CHM 461)*

BMS 309: Laboratory in Human Anatomy (2 credits) – *Prerequisite: C- or better in BMS 208 or BMS 251*

BMS 310: Basic Pathophysiology (3 credits) – *Prerequisite: C- or better in BMS 290 or BMS 251*

BMS 355: Anatomy of Joints (2 credits) – *Prerequisite: Both BMS 208 and BMS 309, or equivalent human anatomy course, or (both BMS 251 and MOV 300)*

BMS 427: Neuroanatomy (1 credit) – *Prerequisite: C- or better in BMS 290 or BMS 251*

CHM 232: Biological Chemistry (4 credits)-Not available starting in Fall 2025

EXS 360: Strength and Conditioning for Athletic Performance (3 credits) – *Prerequisite: EXS 320 and EXS 321 or 322*

EXS 400: Biomechanics (3 credits) – *Prerequisite: MOV 300*

EXS 440: Environmental Exercise Physiology (3 credits) – *Prerequisite: MOV 304*

MOV 102: First Aid, CPR, and AED (2 credits)

MOV 310: Motor Skill Development (3 credits)

PHY 216: Physics of Sport (4 credits) – *Prerequisite: MTH 108 and 109 (or MTH 110)*

PHY 221: General Physics II (5 credits) – *Prerequisite: PHY 220*

PSY 303: Psychopathology (3 credits) – *Prerequisite: PSY 101*

PSY 330: Foundations of Behavioral Neuroscience (3 credits) – *Prerequisite: PSY 101*

PSY 364: Life Span Developmental Psychology (3 credits) – *Prerequisite: PSY 101*

PSY 431: Introduction to Neuropsychology (3 credits) – *Prerequisite: PSY 101 and one of PSY 300, BMS 301, CJ 300, PLS 300, or SW 430*