EXERCISE SCIENCE, WELLNESS & SPORTS, B.S.

Learning Outcomes

Upon successful completion of the program of studies for Exercise Science, Wellness & Sports, the student will receive a B.S. in Exercise Science, Wellness & Sports and will have given evidence of the following outcomes and goals:

- Students will recall and apply the major concepts of exercise science, especially in the areas of functional anatomy, physiological responses to exercise, and the principles of nutrition, through standardized testing and in-class exams.
- Within lab demonstrations, class assignments and case studies, students will apply skills related to conducting exercise tests and prescribing exercise programs, including, but not limited to, stratifying the population according to risk, choosing an appropriate test based on health status, conducting fitness tests, and prescribing exercise programs for both healthy and diseased populations.
- Students will communicate effectively in both written and oral formats, alone and in teams, and demonstrate academic research skills as applied to exercise science through assigned writing and research-based assignments and in-class presentations.
- Students will reflect upon and apply professional standards and ethics in exercise science professions through personal integration, case studies, and internship opportunities.

Requirements

To earn this degree, students must successfully complete at least 120 credits, including General Education (http://catalog.georgian.edu/undergraduate/academic-programs/bridge-general-education-program-requirements/) requirements and the major requirements below.

Major Sequence

Students choose one of two concentrations: Exercise Science or Health and Physical Education.

Exercise Science Concentration

Students must complete 36 exercise science credits, plus courses in related areas, including:

Code	Title	Credits
Required Courses		
ES100	Exploration of Exercise Science	1.0
ES111	Found Ex Science & Wellness	3.0
ES220	Introduction to Nutrition	3.0
ES251	Biomechanics [1]	3.0
ES252	Kinesiology & Applied Anatomy	3.0
ES330	Exercise Physiology	4.0
ES350	Exercise Testing & Prescription	4.0
ES390	Internship I	3.0
ES391	Internship II [2]	3.0
ES470	Research Methods in Exercise & Sport	3.0
Exercise Science electives		6.0
Related Courses		
BI111	Life: Human Biology	4.0
or BI121	Cellular Organiz., Energetics & Function	
BI203	Experimental Design & Statistics	3.0
BI213	Human Anatomy & Physiology I	4.0
BI214	Human Anatomy & Physiology II	4.0
Select one of the following:		4.0-8.0
CH151	Chemistry for the Health Sciences	
CH113 & CH114	General Chemistry I and General Chemistry II	
MA109	College Algebra [3]	3.0
Total Credits		**58.0-62.0**

1. ES251 Biomechanics can be substituted with PH111 Physics in Everyday Life I and PH112 Physics in Everyday Life II, or PH115 College Physics I and PH116 College Physics II, or PH121 University Physics I and PH122 University Physics II.
2. ES391 Internship II can be substituted with ES392 Coaching Internship or ES471 Research Project in Exercise Science.
3. Evidence of algebra proficiency may replace MA109 College Algebra.

Transfer students are required to take a minimum of 14 ES credits at GCU, and a minimum of 23 credits including the interdisciplinary courses required for the major. Students may choose to complete the requirements for one or more tracks.

Health & Physical Education Concentration

Students must complete 33 exercise science credits, plus courses in related areas, including:

Code	Title	Credits
Required Courses		
ES111	Found Ex Science & Wellness	3.0
ES160	First Aid & CPR	1.0
ES220	Introduction to Nutrition	3.0
ES252	Kinesiology & Applied Anatomy	3.0
ES330	Exercise Physiology	4.0
ES340	Health & Weight Management	3.0
ES350	Exercise Testing & Prescription	4.0
HPE/ES260	Motor Development, Learning & Teaching	3.0
HPE/ES355	Methods of Secondary Health & Phys.Ed.	3.0
PE (1 credit) courses that include at least one single, dual, and team activity		6.0
Related Courses		
BI213	Human Anatomy & Physiology I	4.0
BI214	Human Anatomy & Physiology II	4.0
CH151	Chemistry for the Health Sciences	4.0
PS221	Child & Adolescent Development	3.0
PS225	Educational Psychology	3.0
PS245	Psychology of the Exceptional Child	3.0
Total Credits		**54.0**

Transfer students are required to take a minimum of 14 ES credits at GCU and a minimum of 23 credits, including the interdisciplinary courses required for the major. Students seeking teacher certification also

complete the teacher certification courses as shown in the School of Education section of the catalog.

Degree Map(s)

This degree map is for only the Exercise Science concentration. Please consult your academic advisor for other degree maps.

Course	Title	Credits
First Year		
Fall Semester		
GEN101	Pathway to the Bridge [1]	2.0
EN111 or EN221	Academic Writing and Research I [1] or Honors Argument: Rhetoric & Research	3.0
MA109	College Algebra [1,2]	3.0
BI111 or BI121	Life: Human Biology [1,2] or Cellular Organiz., Energetics & Function	4.0
ES111	Found Ex Science & Wellness [2]	3.0
	Credits	**15.0**
Spring Semester		
GEN199	WI:Discovering Self in the Universe [1]	3.0
ES100	Exploration of Exercise Science [2]	1.0
Mod. Lang. or V&P Arts [1]		3.0
BI213	Human Anatomy & Physiology I [2]	4.0
ES220	Introduction to Nutrition [2]	3.0
	Credits	**14.0**
Second Year		
Fall Semester		
Literature [1]		3.0
Social Science 1 or History [1]		3.0
ES Elective [2]		3.0
BI214	Human Anatomy & Physiology II [2]	4.0
CH113 or CH151	General Chemistry I [2] or Chemistry for the Health Sciences	4.0
	Credits	**17.0**
Spring Semester		
PL245	Philosophical Inquiry (or Religious Studies) [1]	3.0
Social Science 1 or History [1]		3.0
Select one of the following:		3.0-4.0
CH114	General Chemistry II [2]	
Elective		
ES252	Kinesiology & Applied Anatomy	3.0
BI203	Experimental Design & Statistics [2]	3.0
	Credits	**15.0-16.0**
Third Year		
Fall Semester		
PL245	Philosophical Inquiry (or Religious Studies) [1]	3.0
Mod. Lang. or V&P Arts [1]		3.0
ES Elective [2]		3.0
ES251	Biomechanics	3.0
ES330	Exercise Physiology [2]	4.0
	Credits	**16.0**
Spring Semester		
Select one of the following: [1]		3.0
Ethics		
WS311	Shaping Lives: Women & Gender	
GEN400	WI:Visioning a Future	
Social Science 2 [1]		3.0
ES350	Exercise Testing & Prescription [2]	4.0
ES160	First Aid & CPR [2]	1.0
Elective		3.0
	Credits	**14.0**
Fourth Year		
Fall Semester		
Select one of the following: [1]		3.0
Ethics		
WS311	Shaping Lives: Women & Gender	
GEN400	WI:Visioning a Future	
ES390	Internship I [2]	3.0
ES470	Research Methods in Exercise & Sport [2]	3.0
Elective		3.0
Elective		3.0
	Credits	**15.0**
Spring Semester		
Select one of the following: [1]		3.0
Ethics		
WS311	Shaping Lives: Women & Gender	
GEN400	WI:Visioning a Future	
ES391	Internship II [2]	3.0
Elective		3.0
Elective		3.0
Elective		3.0
	Credits	**15.0**
	Total Credits	**121.0-122.0**

[1] General Education
[2] Major

This degree map is for only the Health and Physical Education concentration with the option for Teacher of Health and Physical Education (K–12) with Teacher of Students with Disabilities Endorsement. Please consult your academic advisor for other degree maps.

Course	Title	Credits
First Year		
Fall Semester		
GEN101	Pathway to the Bridge [1]	2.0
EN111 or EN221	Academic Writing and Research I [1] or Honors Argument: Rhetoric & Research	3.0
MA109	College Algebra [1,2]	3.0

BI111 or BI121	Life: Human Biology [1,2] or Cellular Organiz., Energetics & Function	4.0
ES111	Found Ex Science & Wellness [2]	3.0
Social Science 1 [1]		3.0
	Credits	**18.0**
Spring Semester		
GEN199	WI:Discovering Self in the Universe [1]	3.0
Mod. Lang [1]		3.0
V&P Arts [1]		3.0
BI213	Human Anatomy & Physiology I [2]	4.0
ES220	Introduction to Nutrition [2]	3.0
Physical Education [2]		1.0
Physical Education [2]		1.0
	Credits	**18.0**
Second Year		
Fall Semester		
Literature [1]		3.0
Social Science 2 (PS221) [1,3]		3.0
History [1]		3.0
HPE/ES260	Motor Development, Learning & Teaching [2]	3.0
BI214	Human Anatomy & Physiology II [2]	4.0
PS225	Educational Psychology [2]	3.0
	Credits	**19.0**
Spring Semester		
ES252	Kinesiology & Applied Anatomy	3.0
ES340	Health & Weight Management [2]	3.0
CH151	Chemistry for the Health Sciences [2]	4.0
Physical Education [2]		1.0
ED3110	Ethics & Foundations of Incl & SpEd [3]	3.0
PS245	Psychology of the Exceptional Child [2]	3.0
ED2999	Field Experience in Special Education [3]	1.0
	Credits	**18.0**
Third Year		
Fall Semester		
Religious Studies [1]		3.0
ES330	Exercise Physiology [2]	4.0
ED3120	Instr Dsgn & Techn Intgr Incl SecEd [3]	3.0
ED3210	Instr in Literacy in Sec Incl & SpEd [3]	3.0
ED3303	Evi-Based Prac for Inst Stdnts w/ Autism [3]	3.0
Physical Education [2]		1.0
Physical Education [2]		1.0
	Credits	**18.0**
Spring Semester		
Select one of the following: [1]		3.0
Ethics		
WS311	Shaping Lives: Women & Gender	
GEN400	WI:Visioning a Future	
PL245	Philosophical Inquiry [1]	3.0
ES350	Exercise Testing & Prescription [2]	4.0
ES160	First Aid & CPR [2]	1.0
Physical Education [2]		1.0
ED3219	Sec Subj Instr Incl & SpEd Bus [3]	3.0
ED3302	Accom Mod & Asst Techn for SWD [3]	3.0
	Credits	**18.0**
Fourth Year		
Fall Semester		
Select one of the following: [1]		3.0
Ethics		
WS311	Shaping Lives: Women & Gender	
GEN400	WI:Visioning a Future	
Select one of the following: [1]		3.0
Ethics		
WS311	Shaping Lives: Women & Gender	
GEN400	WI:Visioning a Future	
HPE/ES355	Methods of Secondary Health & Phys.Ed. [2]	3.0
ED3237	Instr Techn in Incl & SpEd Health & PE [3]	3.0
ED3201	Educational Assessment [3]	3.0
ED4215	Coll Plan w/ Family School & Comm SecEd [3]	3.0
	Credits	**18.0**
Spring Semester		
ED4306	Secondary Education Clinical Practice [3]	9.0
ED4307	Reflective Practice in SecEd & SpED [3]	3.0
	Credits	**12.0**
	Total Credits	**139.0**

1 General Education
2 Major
3 Teacher of Health and Physical Education (K–12) with Teacher of Students with Disabilities Endorsement