

EXERCISE SCIENCE, B.S.

Exercise Science is a multidisciplinary field of study involving the active human body in the areas of anatomy, physiology, metabolism, and kinetics. Exercise Science is a growing field and an allied health profession. Exercise Science professionals work to understand the effects of therapeutic exercise for:

- Health related outcomes in those with chronic diseases and conditions;
- Fitness programming and outcomes across the general population's lifespan; and
- Sports performance training principles for athletes of all levels.

Exercise Science Professionals will serve in:

- Collegiate and Professional Sports Teams
- Athletic Performance Centers
- Fitness and Wellness Centers
- Hospital Fitness and Clinical Rehabilitation Centers
- University / Industry Research Laboratories
- Weight Control Programs
- Fitness and Sales Industries

Students enrolled in Marshall University's Exercise Science Programs obtain hands-on experiences with health, fitness and sport assessments and testing within our state of the art Exercise Physiology Laboratories (MUEPL (<https://www.marshall.edu/exercise-science/muepl/>)). Internship or Graduate Assistant opportunities involve working with community members in the Diabetes and Cardiometabolic Exercise Center (MU Clinical Exercise Lab (MUCEL (<https://www.marshall.edu/exercise-science/cepl/>)) or with general populations and athletes in the Human Performance Lab (MUEPL (<https://www.marshall.edu/exercise-science/muepl/>)).

Marshall University Exercise Science students are well-prepared for premier certifications in exercise such as American College of Sports Medicine (ACSM) (<https://certification.acsm.org/>) and National Strength and Conditioning Association (NSCA) (https://www.nsca.com/CSCS_Certification_2/).

Admission Requirements


- Accepted into Marshall University
- Declare Clinical Exercise Science as your Major

Graduation Requirements

- A minimum overall GPA of 2.5.
- A minimum grade of C in Major coursework.

Course Requirements

 - General Education Course






 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend

disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.













Code	Title	Credit Hours
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Core Curriculum

<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
Critical Thinking		6
<i>Core 2</i>		
ENG 101  	Beginning Composition	3
ENG 201 	Advanced Composition	3
CMM 103  	Fund Speech-Communication	3
Core II Math Requirement		3-5
Core II Phys./Natural Science		4
Core II Humanities		3
Core II Social Science		3
Core II Fine Arts		3
<i>Additional University Requirements</i>		
Writing Intensive		3
Writing Intensive		3
Multicultural/International		3
Capstone		3

Code	Title	Credit Hours
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Major Course Requirements


BSC 120 	Principles of Biology I	3
BSC 120L 	Principles of Biology I Lab	1
BSC 121 	Principles of Biology II	3
BSC 121L 	Prin of Biology II Lab	1
BSC 227	Human Anatomy	3
BSC 227L	Human Anatomy Lab	1
BSC 228 	Human Physiology	3
BSC 228L 	Human Physiology Lab	1
DTS 210	Nutrition	3
CHM 211 	Principles of Chemistry I ¹	3
CHM 217 	Principles of Chem Lab I	2
CHM 212 	Principles Chemistry II	3
CHM 218 	Principles of Chem Lab II	2
ESS 215	Intro to Exercise Science	3
ESS 345	Exercise Physiology	3
ESS 375	Fitness Assess & Exerc Prescr	3
ESS 386	Adult Fitness	3
ESS 442	Princ of Strength & Cond	3
ESS 443	Prin of Strength Cond Lab	1
ESS 478	Energy Sources Body Comp	3
ESS 491 	Internship Exercise Science	6
HP 240	Intro to Human Diseases in HS	3
HS 200 	Comp Medical Terminology (CT)	3
HS 201	Intro Appl Anat & Physiol	3
HS 222	HLth Prov First Aid/CPR/AED	3

HS 365	Functional Kinesiology	3
HS 365L	Functional Kinesiology Lab	1
HS 369	Motor Learning	3
HS 405	Sport Psychology	3
or PSY 405	Sport Psychology	
HS 410	Organ Admin in Kines	3
PSY 201 	Introductory Psychology (CT)	3
PSY 223 	Elem Behavioral Stat	3
PSY 440	Physiological Psychology	3
SOC 200 	Understanding Society (CT)	3




¹ CHM 111 may be required based on pre-requisites or placement exam.

Semester Plan




 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

First Year




First Semester		Credit Hours
HS 200 	Comp Medical Terminology (CT)	3
HS 201	Intro Appl Anat & Physiol	3
ENG 101 	Beginning Composition	3
MTH 121 	Concepts and Applications (CT) (Or Higher)	3
FYS 100	First Yr Sem Critical Thinking	3
UNI 100	Freshman First Class	1
Credit Hours		16

Second Semester


BSC 227	Human Anatomy	3
BSC 227L	Human Anatomy Lab	1
ENG 201 	Advanced Composition	3
PSY 201 	Introductory Psychology (CT)	3
Fine Art Elective		3
CMM 103 	Fund Speech-Communication	3
Credit Hours		16


Second Year

First Semester

BSC 228 	Human Physiology	3
BSC 228L 	Human Physiology Lab	1
ESS 215	Intro to Exercise Science	3
HS 222	Hlth Prov First Aid/CPR/AED	3
Restricted Elective		3
PSY 223 	Elem Behavioral Stat	3
Credit Hours		16



Second Semester

HS 365	Functional Kinesiology	3
HS 365L	Functional Kinesiology Lab	1
HS 410	Organ Admin in Kines	3
BSC 120 	Principles of Biology I	3




BSC 120L 	Principles of Biology I Lab	1
DTS 210	Nutrition	3
Credit Hours		14

Third Year

First Semester



ESS 345	Exercise Physiology	3
PSY 440	Physiological Psychology	3
BSC 121 	Principles of Biology II	3
BSC 121L 	Prin of Biology II Lab	1
Restricted Elective		3
Humanities Elective		3
Credit Hours		16

Second Semester


ESS 386	Adult Fitness	3
ESS 478	Energy Sources Body Comp	3
HS 369	Motor Learning	3
CHM 211 	Principles of Chemistry I	3
CHM 217 	Principles of Chem Lab I	2
SOC 200 	Understanding Society (CT)	3
Credit Hours		17

Fourth Year

First Semester

ESS 375	Fitness Assess & Exerc Prescr	3
ESS 442	Princ of Strength & Cond	3
ESS 443	Prin of Strength Cond Lab	1
CHM 212 	Principles Chemistry II	3
CHM 218 	Principles of Chem Lab II	2
Credit Hours		12

Second Semester

ESS 491 	Internship Exercise Science	6
HP 240	Intro to Human Diseases in HS	3
Restricted Elective		1
HS 405	Sport Psychology	3
or PSY 405	or Sport Psychology	
Credit Hours		13
Total Credit Hours		120

Areas of Emphasis

- Pre-Med, Emphasis (Exercise Science) (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/health-movement-sciences/exercise-science-bs/pre-med-emphasis-exercise-science/>)
- Pre-Physical Therapy, Emphasis (Exercise Science) (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/health-movement-sciences/exercise-science-bs/pre-physical-therapy-emphasis-exercise-science/>)
- Pre-Physician Assistant, Emphasis (Exercise Science) (<http://catalog.marshall.edu/undergraduate/programs-az/health-professions/health-movement-sciences/exercise-science-bs/pre-physician-assistant-emphasis-exercise-science/>)