











# CLINICAL EXERCISE PHYSIOLOGY, EMPHASIS










 - 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.

## Major

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
<b>Core Curriculum</b>		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
HS 200  	Comp Medical Terminology (CT)	3
PSY 201  	Introductory Psychology (CT)	3
<i>Core 2</i>		
ENG 101  	Beginning Composition	3
ENG 201 	Advanced Composition	3
CMM 103  	Fund Speech-Communication	3
BSC 228  	Human Physiology	4
	Core II Mathematics	3
	Core II Humanities (WI, MC/I)	3
	Core II Fine Arts	3
PSY 201  	Introductory Psychology (CT)	3
<i>Additional University Requirements</i>		
	Writing Intensive (Core II Humanities)	3
	Writing Intensive	3
	Multicultural/International (Core II Humanities)	3
ESS 491 	Internship Exercise Science (Capstone)	6
<b>Major-Specific</b>		
BSC 227 	Human Anatomy	4
DTS 210	Nutrition	3
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	Exercise Metabolism	3
ESS 491 	Internship Exercise Science <sup>1</sup>	6
HS 200  	Comp Medical Terminology (CT)	3
HS 222 	Hlth Prov First Aid/CPR/AED	3
HS 365	Functional Kinesiology	3
PSY 223 	Elem Behavioral Stat	3





PSY 440	Physiological Psychology	3
Pre-requisite or Free Elective		3
PSY 311	Child Development	3
or PSY 312	Adult Development	
<i>Ethics Course</i>		
Select one of the following:		3
STHM 401	Ethics in Sport	3
PHL 202 	Ethics of Health Care (CT)	
PHL 302	Applied Ethics	
PHL 303	Ethics	
<b>Area of Emphasis-Specific</b>		
BSC 120 	Principles of Biology	4
BSC 121 	Principles of Biology	4
CHM 211  	Principles of Chemistry I	3
CHM 217  	Principles of Chem Lab I	2
CHM 212 	Principles Chemistry II	3
CHM 218 	Principles of Chem Lab II	2
	Clinical Exercise Physiology Elective	4
	Clinical Exercise Physiology Elective	4
	Free Elective	2
	Free Elective	3

<sup>1</sup> Must be at least senior status into the summer of the last academic year and must have completed ESS 375 Fitness Assess & Exerc Prescr prior to starting the internship experience (completions of ESS 386 Adult Fitness, ESS 442 Princ of Strength & Cond, and ESS 443 Prin of Strength Cond Lab are strongly recommended).

## Major Information

- Courses listed in "Area of Emphasis Specific" are suggested courses. Students should discuss with advisor and select courses based on their career interests. The following electives are suggested for students planning to pursue professional school:

- for PT school application:


Code	Title	Credit Hours
PHY 201 	College Physics I	3
PHY 202 	General Physics I Laboratory	1
PHY 203 	College Physics II	3
PHY 204 	General Physics 2 Laboratory	1

- for PA school application:

Code	Title	Credit Hours
BSC 302	Principles of Microbiology	3
BSC 304	Microbiology Lab	2
CHM 355	Organic Chemistry I <sup>1</sup>	3
CHM 356	Organic Chemistry II <sup>1</sup>	3
CHM 361	Intro Organic Chm Lab <sup>1</sup>	3

<sup>1</sup> CHM 355, CHM 356, and CHM 361 may be replaced by BSC 365 or others.


- for OT school application:


Code	Title	Credit Hours
PSY 311	Child Development	3
PSY 408	Abnormal Psychology	3
SOC 440	Intro to the Soc of Aging	3
ANT 201 	Cultural Anthropology (CT)	3
Or others		

- for Cardiac rehabilitation specialist:

Code	Title	Credit Hours
HP 210	Health Sciences Seminar	3
HP 420	Allied Health Sciences Admin	3
HP 480	Special Topics in HP	1-4
HS 481	Special Topics	1-4
Or others		





- Students may need to take extra courses to satisfy prerequisites.
- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.
- Course offerings and course attributes are subject to change each semester. Please consult each semester's schedule of courses for availability and attributes.
- Graduation Requirements:
  - A minimum of 120 credit hours;
  - A minimum grade of C in Exercise Science core courses; and
  - A minimum GPA of 2.5 in Exercise Science core courses. (Exercise Science majors must maintain the minimum 2.5 GPA in Exercise Science core courses after the first semester in which they are enrolled.)


 - 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.






## Four Year Plan

Exercise Science is a scientific program of study that focuses on the anatomy, physiology, biochemistry, and biophysics of human movement, and applications to exercise and therapeutic rehabilitation. Examples of coursework include instruction in clinical exercise physiology, exercise physiology, biomechanics, fitness assessment and exercise prescription, energy metabolism, and strength and conditioning. Exercise Science prepares qualified professionals for employment in health and fitness centers, hospital based health and wellness programs, corporate based health and wellness programs, cardiac rehabilitation, strength and conditioning, and allied health areas.

Course	Title	Credit Hours
<b>First Year</b>		
<b>First Semester</b>		
CMM 103  	Fund Speech-Communication	3
ENG 101  	Beginning Composition	3
ESS 215	Intro to Exercise Science	3



BSC 120 	Principles of Biology	4
UNI 100	Freshman First Class	1
<b>Credit Hours</b>		<b>14</b>

### Second Semester




HS 200  	Comp Medical Terminology (CT)	3
FYS 100	First Yr Sem Critical Thinking	3
PSY 201  	Introductory Psychology (CT)	3
BSC 121 	Principles of Biology	4
Pre-requisite or Free Elective		3
<b>Credit Hours</b>		<b>16</b>

### Second Year

#### First Semester






BSC 227 	Human Anatomy	4
Core II Fine Arts		4
PSY 311	Child Development	3
or PSY 312	or Adult Development	
Core II Mathematics		3
ENG 201 	Advanced Composition	3
<b>Credit Hours</b>		<b>17</b>

#### Second Semester




HS 222 	Hlth Prov First Aid/CPR/AED	3
BSC 228  	Human Physiology	4
Writing Intensive		3
Core II Humanities (WI, MC/I)		3
Free Elective		3
<b>Credit Hours</b>		<b>16</b>

### Third Year

#### First Semester

DTS 210	Nutrition	3
ESS 345	Exercise Physiology	3
CHM 211  	Principles of Chemistry I	3
CHM 217  	Principles of Chem Lab I	2
PSY 223 	Elem Behavioral Stat	3
Free Elective		2
<b>Credit Hours</b>		<b>16</b>

#### Second Semester

ESS 375 	Fitness Assess & Exerc Prescr	3
ESS 386	Adult Fitness	3
HS 365	Functional Kinesiology	3
CHM 212 	Principles Chemistry II	3
CHM 218 	Principles of Chem Lab II	2
<b>Credit Hours</b>		<b>14</b>


### Fourth Year

#### First Semester

ESS 478	Exercise Metabolism	3
Clinical Exercise Physiology Elective		4
Ethics Course		3
Clinical Exercise Physiology Elective		4
<b>Credit Hours</b>		<b>14</b>

#### Second Semester

PSY 440	Physiological Psychology	3
---------	--------------------------	---

ESS 491 	Internship Exercise Science	6
ESS 442	Princ of Strength & Cond	3
ESS 443	Prin of Strength Cond Lab	1
<b>Credit Hours</b>		<b>13</b>
<b>Total Credit Hours</b>		<b>120</b>