

# EXERCISE AND SPORT SCIENCE COMPREHENSIVE MAJOR: CLINICAL EXERCISE SCIENCE EMPHASIS

## Program Requirements

A minimum of 73 credits is required, including the 15-credit Exercise and Sport Science Nucleus:

To graduate, all exercise and sport science majors must complete ESS 181 Foundations of Exercise and Sport Science and ESS 185 Lifetime Wellness with a minimum grade of "C":

Code	Title	Credits
<b>Exercise and Sport Science Nucleus</b>		
ESS 181	Foundations of Exercise and Sport Science	3
ESS 185	Lifetime Wellness	3
ESS 320	Psychology of Sport and Physical Activity	3
ESS 490	Sociology of Sport and Physical Activity	3
Select one of the following ESS Capstone courses: <sup>1</sup>		3
ESS 495	Senior Seminar in Exercise and Sport Science	
EDUC 410	K-12 Student Teaching	
ESS 498	Internship in Exercise and Sport Science	
<b>Total Credits</b>		<b>15</b>

<sup>1</sup> EDUC 410 K-12 Student Teaching is a capstone option for K-12 Physical Education majors seeking Colorado licensure; ESS 498 Internship in Exercise and Sport Science is a capstone option for the ESS Standard Emphasis.

First Aid/CPR competency and the following:

Code	Title	Credits
BIOL 150	Biological Principles (with laboratory) (GT-SC1)	4
BIOL 372	Human Anatomy and Physiology I (with laboratory)	4
BIOL 373	Human Anatomy and Physiology II (with laboratory)	4
CHEM 111	General Chemistry I (GT-SC2)	3
CHEM 112	General Chemistry Laboratory I (GT-SC1)	1
CHEM 113	General Chemistry II	3
CHEM 114	General Chemistry Laboratory II	1
ESS 275	Human Motor Development and Learning	3
ESS 298	Fitness Instruction	3
ESS 330	Exercise Physiology	3
ESS 331	Exercise Physiology Lab	1
ESS 380	Biomechanics	3
ESS 410	Assessment and Exercise Prescription	3
ESS 411	Wellness Elevated I	3
ESS 412	Exercise Biochemistry	3
ESS 430	Topics in Clinical Exercise Physiology	3
ESS 431	Wellness Elevated II	3
MATH 140	College Algebra (GT-MA1)	3

PHYS 140	Introductory Physics (with laboratory) (GT-SC1)	4
One of the following:		3
BIOL 300	Basic Nutrition	
ESS 360	Nutrition for Wellness and Performance	
<b>Total Credits</b>		<b>58</b>

## Chiropractic Education

Western has a 3+1 agreement with Palmer College of Chiropractic. Students must complete 90 credits at Western, including General Education and the Clinical Exercise Science Emphasis. Students who meet Palmer's entrance requirements may enroll at one of the three Palmer campuses, and after successful completion of the first year of the D.C. program, receive credit for completion of their fourth year at Western, transferring Palmer credits back to Western in order to complete their undergraduate degree. Appropriate coursework should be taken in consultation with an academic advisor.

Course	Title	Credits
<b>Year One</b>		
"C" or better required for both ESS 181 and ESS 185 to receive credit toward ESS degree.		
<b>Credits</b>		<b>0</b>
<b>Fall</b>		
ESS 181 or ESS 185	Foundations of Exercise and Sport Science or Lifetime Wellness	3
CHEM 111	General Chemistry I (GT-SC2) <small>Milestone course &amp; prerequisite for BIOL 372.</small>	3
CHEM 112	General Chemistry Laboratory I (GT-SC1)	1
ENG 102	Writing and Rhetoric I (GT-CO1)	3
MATH 140	College Algebra (GT-MA1)	3
HWTR 100	First Year Seminar	1
Gen Ed	General Education Courses	3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
ESS 181 or ESS 185	Foundations of Exercise and Sport Science or Lifetime Wellness	3
BIOL 150	Biological Principles (with laboratory) (GT-SC1) <small>Milestone course &amp; prerequisite for BIOL 372.</small>	4
CHEM 113	General Chemistry II	3
CHEM 114	General Chemistry Laboratory II	1
Gen Ed	General Education Courses	3
ENG 103	Writing and Rhetoric II (GT-CO2)	3
<b>Credits</b>		<b>17</b>
<b>Year Two</b>		
<b>Fall</b>		
BIOL 372	Human Anatomy and Physiology I (with laboratory) <small>Milestone course. Must achieve a "D" or better to enroll in many higher level ESS classes.</small>	4
PHYS 140	Introductory Physics (with laboratory) (GT-SC1)	4
Gen Ed	General Education Courses	6
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
ESS 275	Human Motor Development and Learning	3
ESS 298	Fitness Instruction	3
BIOL 373	Human Anatomy and Physiology II (with laboratory) <small>Milestone course. Must achieve a "D" or better to enroll in many higher level ESS classes.</small>	4
Gen Ed	General Education Courses	6
<b>Credits</b>		<b>16</b>

**Year Three****Fall**

ESS 330	Exercise Physiology	Milestone course. Must achieve a "D" or better to enroll in many higher level ESS classes.	3
ESS 331	Exercise Physiology Lab	Milestone course. Must achieve a "D" or better to enroll in many higher level ESS classes.	1
ESS 380	Biomechanics		3
Gen Ed	General Education Courses		9
<b>Credits</b>			<b>16</b>

**Spring**

ESS 410	Assessment and Exercise Prescription		3
ESS 320	Psychology of Sport and Physical Activity		3
ESS 412	Exercise Biochemistry		3
Elective	Elective/Minor/2nd Minor		6
<b>Credits</b>			<b>15</b>

**Year Four****Fall**

ESS 360	Nutrition for Wellness and Performance		3
ESS 411	Wellness Elevated I		3
ESS 430	Topics in Clinical Exercise Physiology		3
Elective	Elective (upper division) ESS/Minor/2nd Major		6
<b>Credits</b>			<b>15</b>

**Spring**

ESS 431	Wellness Elevated II		3
ESS 495 or ESS 498	Senior Seminar in Exercise and Sport Science or Internship in Exercise and Sport Science		3
ESS 490	Sociology of Sport and Physical Activity		3
Elective	Elective (upper division) ESS/Minor/2nd Major		3
<b>Credits</b>			<b>12</b>

<b>Total Credits</b>			<b>122</b>
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Western is committed to doing our part to provide each student a clear path to graduation. This four-year degree plan is a sample map for fulfilling requirements in the major and General Education. The pathway that you take to your degree may differ somewhat from this illustration, depending on where you start and the detours and side trips you may take along the way. You are responsible for ensuring your overall, upper division, and major-specific credits as well as GPA requirements are fulfilled for graduation.