

## Teacher Education and Kinesiology

The Exercise Science and Rehabilitation Degree has seven options.

### Major Options

#### Option A: Professional Certification Route

120 credits

#### Option B: Professional Route Pre-Athletic Training

21-22 additional credits

#### Option C: Professional Route Pre-Physical Therapy

32 additional credits

#### Option D: Pre-Occupational therapy

14-15 additional credits

#### Option E: Pre-Physician Assistant

27 additional credits

#### Option F: Pre-Chiropractic

35 additional credits

#### Option G: Pre-Med

36 additional credits

# EXERCISE SCIENCE AND REHABILITATION

## OPTION A: PROFESSIONAL CERTIFICATION ROUTE

### 1<sup>ST</sup> YEAR

Fall	Spring
BIOL 220 Anatomy and Physiology I 4 CR	BIOL 221 Anatomy and Physiology II 4 CR
UNIV 110 University Studies +	ATR 207 Prevention and Care of Injuries 2 CR
PSYC 111 3 CR	KIN 126 Group Fitness/ Yoga 1 CR
KIN 120 Weight Training 1 CR	KIN 433 Exercise Physiology 3 CR
HUM 3 CR	Math 103 4 CR
ENG 110 3 CR	
KIN 100 Concepts of Fitness and Wellness 2	
<b>TOTAL up to 18 CREDITS</b>	<b>TOTAL up to 18 CREDITS</b>

### 2<sup>ND</sup> YEAR

Fall	Spring
KIN 431 Kinesiology 3 Credits	ESR 316 GXT 2
ESR 323 Basic EKG for Ex Science 2	ESR 317 GXT lab 1 CR
ESR 226 Meth of T Group Fit 2 CR	KIN 225 Fitness Leadership 2 CR
KIN 301 Psychomotor Development 2 CR	KIN 441 Eval of Psychomotor Performance 3 CR
ATR 206 Medical Cond, Spec pop, and Physical Activity 3	ENG 120 3 CR
HMS 215 Pharmacology 3 CR	ESR 227 Strength and Conditioning prog design 2 CR
<b>up to 18 CREDITS</b>	<b>up to 18 CREDITS</b>

### 3<sup>RD</sup> YEAR

Fall	Spring
KIN 325 Personal Training Methods -2 CR	ATR 308 Biomechanics 3 CR
ESR 303 Therapeutic Exercise part 1- 3 CR	KIN 310 Org and Adm of PE Ath 2 CR
ESR 306 Health Risk Appraisal 2 CR	ATR 304 Ther Exercise Part 2 3 CR
HIST 3 CR	PSYCH 241 Intro to Statistics 3 CR or Math 240
Comm 110 -3 CR	ESR 342. Exercise Programming for Older Adults. 2 CT
HUM 3 CR	HMS 208 Medical Terminology 2 CR
<b>up to 18 CREDITS</b>	<b>up to 18 CREDITS</b>

### 4<sup>TH</sup> YEAR

Fall	Spring
KIN 334 Nutrition for Physical Perf 2 CR	KIN 407 Psychology of PE and Ath 2 CR
KIN 414 Pathomechanics - 3 CR	ESR 425 Capstone 1 CR
ESR 305 Therapeutic Exercise part 3- 3 CR	ESR 498 5 CR
SOC - 3 CR	
KIN 497 Internship 5 CR	
<b>up to 18 CREDITS</b>	<b>up to 18 CREDITS</b>

\* highlighted fields only offered in the semester shown

## Program curriculum

### Course List

#### Exercise Science and Rehabilitation BS Program Requirements Option A: Professional Certification Route

##### General Education (Not covered by program requirements)

###### Core

<u>ENGL 110</u>	College Composition I	3
<u>ENGL 120</u>	College Composition II	3
<u>COMM 110</u>	Fundamentals of Public Speaking	3
<u>UNIV 110</u>	First Year Seminar	2-3

###### Foundational Content

Humanities (6)

History (3)

Social Science (3)

###### Required Support Courses

###### May be used to satisfy General Education Requirements

<u>KIN 120</u>	Strength Training	1
<u>KIN 126</u>	Group Exercise	1
<u>BIOL 220</u>	Anatomy And Physiology I	4
<u>BIOL 221</u>	Anatomy And Physiology II	4
<u>MATH 103</u>	College Algebra	4
<u>MATH 210</u>	Elementary Statistics	4
<u>PSY 111</u>	Introduction to Psychology	3

###### Required ES Courses

<u>ATR 206</u>	Medical Conditions	3
<u>ATR 207</u>	Prevention & Care of Injuries	2
<u>ATR 304</u>	Therapeutic Exercise	3
<u>ATR 308</u>	Biomechanics	2
<u>KIN 225</u>	Fitness Leadership	2
<u>ESR 226</u>	Methods of Teaching Group Exercise and Strength Training	2
<u>KIN 301</u>	Psychomotor Development	2
<u>ESR 303</u>	Therapeutic Exercise I. 3 Hours.	3
<u>ESR 305</u>	Therapeutic Exercise III.	3
<u>ESR 227</u>	Strength and Conditioning Programming Principles and Methods	2
<u>ESR 306</u>	Health Risk Appraisal	2
<u>ESR 323</u>	Basic EKG for Exercise Science	2
<u>KIN 325</u>	Personal Training Methods	2
<u>KIN 334</u>	Nutrition for Physical Performance	2
<u>ESR 316</u>	Graded Exercise Testing and Prescription	2
<u>ESR 342</u>	Exercise Programming for Older Adults	2
<u>ESR 317</u>	Graded Exercise Testing Lab	1
<u>KIN 407</u>	Psychology of Physical Education & Athletes	2
<u>KIN 414</u>	Pathomechanics	2
<u>ESR 425</u>	Exercise Science and Rehabilitation Capstone	1
<u>KIN 431</u>	Kinesiology	3

<a href="#">KIN 433</a>	Physiology of Exercise	3
<a href="#">KIN 441</a>	Evaluation of Psychomotor Performance	3
<a href="#">KIN 497</a>	Practicum in Corporate Fitness	8
<a href="#">ESR 498</a>	Internship	8
<a href="#">HMS 215</a>	Principles of Pharmacology	3
<a href="#">HMS 208</a>	Medical Terminology	2

Electives as required to meet 120 credits

Students seeking professional certification are must follow internship requirements for that certification.

**Total Hours** 120

**Exercise Science and Rehabilitation BS Program Requirements Option B: Professional Route Pre-**

**Athletic Training**

**Course List**

Option B Pre-Athletic Training Requires the following courses in addition to the Option A course requirements. (21-22 additional Credits)

<a href="#">CHEM 121</a>	General Chemistry I	5
<a href="#">CHEM 122</a>	General Chemistry II	5
<a href="#">BIOL 150</a>	Introduction To Cellular Biology	4
*Internship is recommended		
<a href="#">PSY 255</a>	Child & Adolescent Psychology	3
Elect from (4-5 cr):		
<a href="#">PHYS 211</a>	College Physics I	4
<a href="#">PHYS 251</a>	University Physics I	5

**Exercise Science and Rehabilitation BS Program Requirements Option C: Professional Route Pre-**

**Physical Therapy**

**Course List**

Option C Pre-Physical Therapy requires the following courses in addition to the option A course requirements (32 additional Credits)

\*[KIN 317](#) GXT Lab, [KIN 425](#) Capstone, KIN 498 Internship are not required for option C - G

<a href="#">CHEM 121</a>	General Chemistry I	5
<a href="#">CHEM 122</a>	General Chemistry II	5
<a href="#">BIOL 150</a>	Introduction To Cellular Biology	4
<a href="#">BIOL 151</a>	Introduction to Zoology	4
<a href="#">BIOL 220</a>	Anatomy And Physiology I	4
<a href="#">BIOL 221</a>	Anatomy And Physiology II	4
<a href="#">MATH 103</a>	College Algebra	4
<a href="#">MATH 210</a>	Elementary Statistics	4
<a href="#">PHYS 211</a>	College Physics I	4
<a href="#">PHYS 212</a>	College Physics II	4
<a href="#">PSY 255</a>	Child & Adolescent Psychology	3
<a href="#">PSY 270</a>	Abnormal Psychology	3
<a href="#">SOC 110</a>	Introduction to Sociology	3

**Course List**

Exercise Science and Rehabilitation Major Option D: Pre-Occupational therapy requires the following in addition to Option A (14-15 additional Credits)

Choose 4 or 5 credits of either Chem

<a href="#">CHEM 115</a>	Introductory Chemistry	4
<a href="#">CHEM 121</a>	General Chemistry I	5

Choose 4 credits from BIOL 150 or 151

<u>BIOL 150</u>	Introduction To Cellular Biology	4
<u>BIOL 151</u>	Introduction to Zoology	4
<u>BIOL 220</u>	Anatomy And Physiology I	4
<u>BIOL 221</u>	Anatomy And Physiology II	4
<u>MATH 103</u>	College Algebra	4
<u>MATH 210</u>	Elementary Statistics	4
<u>PSY 111</u>	Introduction to Psychology	3
<u>PSY 255</u>	Child & Adolescent Psychology	3
<u>PSY 270</u>	Abnormal Psychology	3
<u>SOC 110</u>	Introduction to Sociology	3

Gen Ed Humanities requirements 6 credits. Minimum 3 cr Humanities, 3 cr fine arts. In at least 2 departments.

#### Course List

Exercise Science and Rehabilitation Major Option E: Pre-Physician Assistant requires the following in addition to Option A (27 additional Credits)

<u>CHEM 121</u>	General Chemistry I	5
<u>CHEM 122</u>	General Chemistry II	5
<u>BIOL 220</u>	Anatomy And Physiology I	4
<u>BIOL 221</u>	Anatomy And Physiology II	4
<u>MATH 103</u>	College Algebra	4
<u>MATH 210</u>	Elementary Statistics	4

Choose between PSY 255 and PSY 270

<u>PSY 255</u>	Child & Adolescent Psychology	3
<u>PSY 270</u>	Abnormal Psychology	3
<u>BIOL 215</u>	Genetics	4
<u>BIOL 302</u>	General Microbiology	4

Elect 6 credits from:

CHEM 341 and CHEM 342

<u>CHEM 341</u>	Organic Chemistry I	5
<u>CHEM 342</u>	Organic Chemistry II	5

CHEM 481, CHEM 482, and CHEM 480L

<u>CHEM 480L</u>	Biochemistry Laboratory	2
<u>CHEM 481</u>	Biochemistry I	3
<u>CHEM 482</u>	Biochemistry II	3

BIOL 150 and BIOL 151

<u>BIOL 150</u>	Introduction To Cellular Biology	4
<u>BIOL 151</u>	Introduction to Zoology	4
<u>BIOL 480</u>	Molecular Biology	4

#### Course List

Exercise Science and Rehabilitation Major Option F: Pre-Chiropractic requires the following in addition to Option A (35 additional Credits)

<u>CHEM 121</u>	General Chemistry I	5
<u>CHEM 122</u>	General Chemistry II	5
<u>CHEM 341</u>	Organic Chemistry I	5
<u>CHEM 342</u>	Organic Chemistry II	5

<b><u>BIOL 150</u></b>	<b>Introduction To Cellular Biology</b>	<b>4</b>
<b><u>BIOL 220</u></b>	<b>Anatomy And Physiology I</b>	<b>4</b>
<b><u>BIOL 221</u></b>	<b>Anatomy And Physiology II</b>	<b>4</b>
<b><u>MATH 103</u></b>	<b>College Algebra</b>	<b>4</b>
<b><u>MATH 210</u></b>	<b>Elementary Statistics</b>	<b>4</b>
<b><u>PHYS 211</u></b>	<b>College Physics I</b>	<b>4</b>
<b><u>PHYS 212</u></b>	<b>College Physics II</b>	<b>4</b>
<b><u>HUM 251</u></b>	<b>Humanities</b>	<b>3</b>
<b><u>HUM 252</u></b>	<b>Humanities</b>	<b>3</b>
<b><u>HUM 253</u></b>	<b>Humanities</b>	<b>3</b>

**Course List**

**Exercise Science and Rehabilitation Major Option G: Pre-Med requires the following in addition to Option A (36 additional Credits)**

<b><u>SOC 110</u></b>	<b>Introduction to Sociology</b>	<b>3</b>
<b><u>MATH 103</u></b>	<b>College Algebra</b>	<b>4</b>
<b><u>MATH 210</u></b>	<b>Elementary Statistics</b>	<b>4</b>
<b><u>CHEM 121</u></b>	<b>General Chemistry I</b>	<b>5</b>
<b><u>CHEM 122</u></b>	<b>General Chemistry II</b>	<b>5</b>
<b><u>CHEM 341</u></b>	<b>Organic Chemistry I</b>	<b>5</b>
<b><u>CHEM 342</u></b>	<b>Organic Chemistry II</b>	<b>5</b>
<b><u>BIOL 220</u></b>	<b>Anatomy And Physiology I</b>	<b>4</b>
<b><u>BIOL 221</u></b>	<b>Anatomy And Physiology II</b>	<b>4</b>
<b><u>BIOL 150</u></b>	<b>Introduction To Cellular Biology</b>	<b>4</b>
<b><u>BIOL 151</u></b>	<b>Introduction to Zoology</b>	<b>4</b>
<b><u>PHYS 211</u></b>	<b>College Physics I</b>	<b>4</b>
<b><u>PHYS 212</u></b>	<b>College Physics II</b>	<b>4</b>
<b><u>PSY 111</u></b>	<b>Introduction to Psychology</b>	<b>3</b>

**Electives Recommended coursework Biochemistry, Genetics, Cell biology**