

# KINESIOLOGY, B.S.

## Mission

The mission of the Kinesiology major is to develop Biblically-centered, highly skilled, and capable scholars, trained to positively impact societal health as Christ-centered professionals and innovative leaders. Our integrative educational approach through classroom, research, and field experiences will prepare students for advanced studies in graduate education, and occupations in healthcare, human performance, and exercise science professions.

## Degree Program

A Bachelor of Science degree in Kinesiology (<https://www.biola.edu/degrees/u/kinesiology-bs/>) is offered upon completion of the University baccalaureate and major requirements.

## Learning Outcomes

### Program Learning Outcomes

Upon completion of the Bachelor of Science in Kinesiology, students will be able to:

1. Identify fundamental scientific concepts and principles (anatomical and physiological) of human movement and performance (ULO 1).
2. Apply knowledge of the human body to determine various health and exercise parameters for individuals, and demonstrate proficiency in measuring and evaluating relevant human performance variables (ULO 3).
3. Synthesize, analyze, and interpret information for critical problem solving in human performance based contexts (ULO 1).
4. Integrate Scripture and personal faith with disciplined-based knowledge pertaining to human performance and capability (ULO 2).

Each Program Learning Outcome (PLO) listed above references at least one of the University Learning Outcomes (ULO 1, 2, 3), which may be found in the General Information section (<https://catalog.biola.edu/general-information/#UniversityLearningOutcomes>) of this catalog.

## Program Requirements

### GPA Requirements

All major requirements must be completed with a C- or better grade.

## Curriculum Requirements

Code	Title	Credits
<b>Program Courses</b>		
Kinesiology majors meet the Core Curriculum requirement of 11 credits in mathematics, science, behavioral science and kinesiology and health science within the major (see concentration tables below). The foreign language requirement is met by two years of high school study in the same language or four credits of college foreign language.		
CHEM 107	Introduction to Chemistry <sup>1</sup>	3
CHEM 105 & CHEM 115	General Chemistry I and General Chemistry I Lab <sup>2</sup>	4

or CHEM 120 & CHEM 121	Principles of Organic and Biochemistry and Principles of Organic and Biochemistry Lab	
PSYC 200	Introduction to Psychology <sup>3</sup>	3
Select a Concentration below <sup>4</sup>		
<b>Total Credits</b>		<b>7-10</b>

<sup>1</sup> CHEM 107 is waived for Exercise Science concentration students who meet the qualifications to enter CHEM 105, and they are required to complete 7 program course credits.

CHEM 107 is waived for Health and Human Performance concentration students who meet the qualifications to enter CHEM 105 or CHEM 120, and they are required to complete 7 program course credits.

See the current Placement Options for CHEM 105 (<https://www.biola.edu/academic-advising/incoming/placement-exams/chemistry-105/>) and CHEM 120 (<https://www.biola.edu/academic-advising/incoming/placement-exams/chemistry-120/>) for more information.

<sup>2</sup> Health and Human Performance concentration students may choose CHEM 120 and CHEM 121.

<sup>3</sup> Fulfills the Behavioral Science Core Curriculum requirement.

<sup>4</sup> See concentration tables below which detail the requirements to earn a Bachelor of Science in Kinesiology degree.

## Concentrations

### Health and Human Performance (61 Credits)

The concentration in Health and Human Performance is ideal for students who wish to work in health and fitness, wellness promotion or strength and conditioning, and serves as preparation for graduate study in exercise physiology, athletic training, and other kinesiology-related disciplines.

This concentration requires 61 credits, 40 of which must be upper-division.

Code	Title	Credits
<b>Program Courses</b>		<b>7-10</b>
<b>Concentration Courses</b>		
BIOS 254	Human Anatomy	4
BIOS 281	Physiology	4
KNES 213	Scientific Principles of Health and Fitness <sup>1</sup>	3
KNES 301	Kinesiology	3
KNES 302	Exercise Physiology	3
KNES 303	Exercise Physiology Laboratory	1
KNES 329	Psychology of Exercise and Health	3
KNES 337	Exercise in Health and Disease	3
KNES 351	Strength and Conditioning Program Design	3
KNES 401	Care and Prevention of Athletic Injuries	3
KNES 434	Leadership in Sport and Human Movement	3
KNES 440	Nutrition and Human Metabolism	3
KNES 446	Functional Assessment and the Prescription of Exercise	3

KNES 447	Functional Assessment and Prescription of Exercise Laboratory	1	CHEM 412	General Biochemistry II	
KNES 449	Clinical Exercise Physiology	3	CHEM 413	Laboratory in General Biochemistry	
Select 2 credits from the following:		2	KNES 200	Public Health Principles and Practice	
KNES 480	Directed Study		KNES 300	Health Education and Health Promotion	
KNES 485	Internship		KNES 307	Measurement and Evaluation in Kinesiology	
KNES 490	Directed Research in Kinesiology and Public Health		KNES 310	Community and Global Health	
MATH 210	Introduction to Probability and Statistics <sup>2</sup>	3	KNES 320	Health Behavior and Health Promotion	
or MATH 318	Biostatistics		KNES 340	Health Policy and Ethics	
Select 4 credits from the following:		4	KNES 355	Health Care Systems	
BIOS 111	Fundamentals of Cellular and Molecular Biology		KNES 402	Evidence Based Sports Medicine	
BIOS 113	Fundamentals of Cellular and Molecular Biology Laboratory		KNES 408	Motor Learning	
BIOS 112	Fundamentals of Organismal Biology		KNES 422	Biomechanics	
BIOS 114	Fundamentals of Organismal Biology Laboratory		KNES 423	Biomechanics Laboratory	
BIOS 282	Microbiology		KNES 460	Topics in Kinesiology and Public Health	
PHSC 111	Physics I <sup>3,4</sup>		KNES 470	Seminars in Kinesiology	
or PHSC 100	Physics I with Foundations		KNES 480	Directed Study	
PHSC 117	Physics I Laboratory <sup>4</sup>		KNES 485	Internship	
Elective Courses: Select 9 credits from the following (6 of the 9 credits must be upper-division) <sup>5</sup>		9	KNES 490	Directed Research in Kinesiology and Public Health	
BIOS 111	Fundamentals of Cellular and Molecular Biology		PHSC 111	Physics I <sup>3,4</sup>	
BIOS 113	Fundamentals of Cellular and Molecular Biology Laboratory		or PHSC 100	Physics I with Foundations	
BIOS 112	Fundamentals of Organismal Biology		PHSC 117	Physics I Laboratory <sup>4</sup>	
BIOS 114	Fundamentals of Organismal Biology Laboratory		PHSC 112	Physics II <sup>6</sup>	
BIOS 282	Microbiology		PHSC 118	Physics II Laboratory <sup>6</sup>	
BIOS 310	Proseotion		PSYC 309	Introduction to Psychopathology	
BIOS 311	Neurobiology		PSYC 315	Industrial/Organizational Psychology	
BIOS 312	Cell and Molecular Biology		PSYC 320	Developmental Psychology: Lifespan	
BIOS 322	Laboratory in Cell and Molecular Biology		PSYC 340	Adolescence and Emerging Adulthood	
BIOS 332	Genetics		PSYC 412	Physiological Psychology	
BIOS 346	Medical Terminology		<b>Concentration Course Requirements: 61 credits</b>		
BUSN 211	Principles of Accounting I		<b>Core Curriculum Requirements (<a href="https://catalog.biola.edu/academic-policies/undergraduate-core-curriculum-program/">https://catalog.biola.edu/academic-policies/undergraduate-core-curriculum-program/</a>)</b>		<b>52-56</b>
BUSN 230	Introduction to Marketing		<b>Total Credits</b>		<b>120-127</b>
BUSN 231	Introduction to Marketing: Practical Application		<sup>1</sup> Fulfills the Kinesiology and Health Science Core Curriculum requirement.		
BUSN 240	Principles of Management		<sup>2</sup> Fulfills the Mathematics Core Curriculum requirement.		
CHEM 106	General Chemistry II		<sup>3</sup> All students who do not meet one of the Physics 111 Placement Options ( <a href="https://www.biola.edu/academic-advising/incoming/placement-exams/physics/">https://www.biola.edu/academic-advising/incoming/placement-exams/physics/</a> ) must enroll in PHSC 100.		
CHEM 116	General Chemistry II Lab		<sup>4</sup> PHSC 111 and PHSC 117, or PHSC 100 and PHSC 117, may be substituted with PHSC 132 and PHSC 134.		
CHEM 301	Organic Chemistry I		<sup>5</sup> Approved transfer coursework may also fulfill this requirement.		
CHEM 302	Organic Chemistry II		<sup>6</sup> PHSC 112 and PHSC 118 may be substituted with PHSC 233 and PHSC 237.		
CHEM 311	Laboratory in Organic Chemistry I				
CHEM 312	Laboratory in Organic Chemistry II				
CHEM 411	General Biochemistry I				

## Exercise Science (62 Credits)

The Exercise Science concentration is for students who plan to pursue a graduate degree (master's or doctoral) in physical therapy, occupational therapy or other programs in allied/sports health care. Our program is designed to meet the prerequisite needs of most nationwide graduate programs.

This concentration requires 62 credits, 38 of which must be upper-division.

Code	Title	Credits
<b>Program Courses</b>		
<b>7-10</b>		
<b>Concentration Courses</b>		
BIOS 254	Human Anatomy	4
BIOS 281	Physiology	4
PHSC 111 or PHSC 100	Physics I <sup>1,2</sup> Physics I with Foundations	3
PHSC 117	Physics I Laboratory <sup>2</sup>	1
KNES 213	Scientific Principles of Health and Fitness <sup>3</sup>	3
KNES 301	Kinesiology	3
KNES 302	Exercise Physiology	3
KNES 303	Exercise Physiology Laboratory	1
KNES 307	Measurement and Evaluation in Kinesiology	3
KNES 329	Psychology of Exercise and Health	3
KNES 402	Evidence Based Sports Medicine	3
KNES 422	Biomechanics	3
KNES 423	Biomechanics Laboratory	1
KNES 440	Nutrition and Human Metabolism	3
KNES 446	Functional Assessment and the Prescription of Exercise	3
KNES 447	Functional Assessment and Prescription of Exercise Laboratory	1
Select 2 credits from the following:		2
KNES 480	Directed Study	
KNES 485	Internship	
KNES 490	Directed Research in Kinesiology and Public Health	
MATH 210 or MATH 318	Introduction to Probability and Statistics <sup>4</sup> Biostatistics	3
Elective Courses: Select 15 credits from the following (9 of the 15 credits must be upper-division) <sup>5</sup>		15
BIOS 111	Fundamentals of Cellular and Molecular Biology	
BIOS 113	Fundamentals of Cellular and Molecular Biology Laboratory	
BIOS 112	Fundamentals of Organismal Biology	
BIOS 114	Fundamentals of Organismal Biology Laboratory	
BIOS 282	Microbiology	
BIOS 310	Prosection	
BIOS 311 or PSYC 412	Neurobiology Physiological Psychology	

BIOS 312	Cell and Molecular Biology
BIOS 322	Laboratory in Cell and Molecular Biology
BIOS 332	Genetics
BIOS 346	Medical Terminology
BUSN 211	Principles of Accounting I <sup>6</sup>
BUSN 230	Introduction to Marketing <sup>6</sup>
BUSN 231	Introduction to Marketing: Practical Application <sup>6</sup>
BUSN 240	Principles of Management <sup>6</sup>
CHEM 106	General Chemistry II
CHEM 116	General Chemistry II Lab
CHEM 301	Organic Chemistry I
CHEM 302	Organic Chemistry II
CHEM 311	Laboratory in Organic Chemistry I
CHEM 312	Laboratory in Organic Chemistry II
CHEM 411	General Biochemistry I
CHEM 412	General Biochemistry II
CHEM 413	Laboratory in General Biochemistry
KNES 200	Public Health Principles and Practice
KNES 300	Health Education and Health Promotion
KNES 310	Community and Global Health
KNES 320	Health Behavior and Health Promotion
KNES 337	Exercise in Health and Disease
KNES 340	Health Policy and Ethics
KNES 351	Strength and Conditioning Program Design
KNES 355	Health Care Systems
KNES 401	Care and Prevention of Athletic Injuries
KNES 408	Motor Learning
KNES 434	Leadership in Sport and Human Movement
KNES 449	Clinical Exercise Physiology
KNES 460	Topics in Kinesiology and Public Health
KNES 470	Seminars in Kinesiology
KNES 480	Directed Study
KNES 485	Internship
KNES 490	Directed Research in Kinesiology and Public Health
PHSC 112	Physics II <sup>7</sup>
PHSC 118	Physics II Laboratory <sup>7</sup>
PSYC 309	Introduction to Psychopathology
PSYC 315	Industrial/Organizational Psychology
PSYC 320	Developmental Psychology: Lifespan
PSYC 340	Adolescence and Emerging Adulthood

<b>Concentration Course Requirements: 62 credits</b>	
<b>Core Curriculum Requirements (<a href="https://catalog.biola.edu/academic-policies/undergraduate-core-curriculum-program/">https://catalog.biola.edu/academic-policies/undergraduate-core-curriculum-program/</a>)</b>	<b>52-56</b>
<b>Total Credits</b>	<b>121-128</b>

- <sup>1</sup> All students who do not meet one of the Physics 111 Placement Options (<https://www.biola.edu/academic-advising/incoming/placement-exams/physics/>) must enroll in PHSC 100.
- <sup>2</sup> PHSC 111 and PHSC 117, or PHSC 100 and PHSC 117, may be substituted with PHSC 132 and PHSC 134.
- <sup>3</sup> Fulfills the Kinesiology and Health Science Core Curriculum requirement.
- <sup>4</sup> Fulfills the Mathematics Core Curriculum requirement.
- <sup>5</sup> Approved transfer coursework may also fulfill this requirement.
- <sup>6</sup> A maximum of 6 credits may be taken from BUSN electives.
- <sup>7</sup> PHSC 112 and PHSC 118 may be substituted with PHSC 233 and PHSC 237.

## Course Sequence

**NOTE:** The course sequence table is designed by the major department and is one way that the classes will work out properly in sequence for your major. However, there are alternative or flexible ways to rotate some of the classes within the same year/level and sometimes between year levels. Please contact your major department advisor to discuss flexible alternatives in scheduling the sequence of your classes.

Taking coursework during the summer session may also be an option to accelerate your degree path.

See Core Curriculum Program section (<https://catalog.biola.edu/academic-policies/undergraduate-core-curriculum-program/>) for a list of approved Core Curriculum courses.

- **Exercise Science (p. 4)**
- **Health and Human Performance (p. 4)**

## Kinesiology, B.S. Exercise Science (KHES)

First Year		
Fall	Credits Spring	Credits
BBST 103 or 165	3 BBST 103 or 165	3
CHEM 107 (if needed per Department)	3 BIOS 254	4
ENGL 100 or 112	3 CHEM 105 & CHEM 115	4
GNST 102	1 PSYC 200 (fulfills Behavioral Science Core Curriculum requirement)	3
Fine Arts (see Core Curriculum)	3 Communication (see Core Curriculum)	3
Foreign Language (see Core Curriculum)	4	
	<b>17</b>	<b>17</b>
Second Year		
Fall	Credits Spring	Credits
BBST 209 or 210	3 BBST 209 or 210	3
HIST 200, 201, or POSC 225	3 BBST 251	3
KNES 213 (fulfills Kinesiology and Health Science Core Curriculum requirement)	3 BIOS 281	4

MATH 210 or 318 (fulfills Mathematics Core Curriculum requirement)	3 KNES 307	3
PHSC 111 or 100	3 Major Elective <sup>1</sup>	3
PHSC 117	1	
	<b>16</b>	<b>16</b>
Third Year		
Fall	Credits Spring	Credits
BBST 300/400 Bible Elective	3 BBST 354	3
BBST 365	3 ENGL 313	3
KNES 301	3 KNES 302	3
Literature (see Core Curriculum)	3 KNES 303	1
Philosophy (see Core Curriculum)	3 KNES 480, 485, or 490	1
	Major Elective <sup>1</sup>	3
	Writing Competency Requirement ( <a href="https://catalog.biola.edu/academic-policies/undergraduate-requirements-policies/#WritingCompetencyRequirement">https://catalog.biola.edu/academic-policies/undergraduate-requirements-policies/#WritingCompetencyRequirement</a> )	
	Graduation Application due in Registrar's Office	
	<b>15</b>	<b>14</b>
Fourth Year		
Fall	Credits Spring	Credits
BBST 300/400 Bible Elective	3 BBST 465	3
KNES 329	3 KNES 402	3
KNES 446	3 KNES 422	3
KNES 447	1 KNES 423	1
KNES 480, 485, or 490	1 KNES 440	3
Major Elective (upper-division) <sup>1</sup>	3 Major Elective (upper-division) <sup>1</sup>	3
Major Elective (upper-division) <sup>1</sup>	3	
	<b>17</b>	<b>16</b>
<b>Total Credits 128</b>		

<sup>1</sup> Choose 15 credits of electives from approved list in catalog. See Department for advisement.

## Kinesiology, B.S. Health and Human Performance (KHHP)

First Year		
Fall	Credits Spring	Credits
BBST 103 or 165	3 BBST 103 or 165	3
CHEM 107 (if needed per Department)	3 BIOS 254	4
ENGL 100 or 112	3 CHEM 105 & CHEM 115 (CHEM 120 & CHEM 121)	4
Foreign Language (see Core Curriculum)	4 PSYC 200 (fulfills Behavioral Science Core Curriculum requirement)	3
GNST 102	1 Communication (see Core Curriculum)	3
	<b>14</b>	<b>17</b>
Second Year		
Fall	Credits Spring	Credits
BBST 209 or 210	3 BBST 209 or 210	3
KNES 213 (fulfills Kinesiology and Health Science Core Curriculum requirement)	3 BBST 251	3

MATH 210 or 318 (fulfills Mathematics Core Curriculum requirement)	3 BIOS 281	4
PHSC 111, 100, 117, BIOS 111, BIOS 113, BIOS 112, BIOS 114, or BIOS 282	4 HIST 200, 201, or POSC 225	3
Fine Arts (see Core Curriculum)	3 Literature (see Core Curriculum)	3

**16** **16**

**Third Year**

Fall	Credits Spring	Credits
BBST 300/400 Bible Elective	3 BBST 354	3
BBST 365	3 ENGL 313	3
KNES 301	3 KNES 302	3
KNES 337	3 KNES 303	1
KNES 480, 485, or 490	1 KNES 351	3
Philosophy (see Core Curriculum)	3 Major Elective <sup>1</sup>	3

Writing Competency Requirement (<https://catalog.biola.edu/academic-policies/undergraduate-requirements-policies/#WritingCompetencyRequirement>)

Graduation Application due in Registrar's Office

**16** **16**

**Fourth Year**

Fall	Credits Spring	Credits
BBST 300/400 Bible Elective	3 BBST 465	3
KNES 329	3 KNES 434	3
KNES 401	3 KNES 440	3
KNES 446	3 KNES 449	3
KNES 447	1 Major Elective (upper-division) <sup>1</sup>	3
KNES 480, 485, or 490	1	
Major Elective (upper-division) <sup>1</sup>	3	

**17** **15**

**Total Credits 127**

<sup>1</sup> Choose 9 credits of electives from approved list in catalog. See Department for advisement.

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**NOTE:** The course sequence table is designed by the major department and is one way that the classes will work out properly in sequence for your major. However, there are alternative or flexible ways to rotate some of the classes within the same year/level and sometimes between year levels. Please contact your major department advisor to discuss flexible alternatives in scheduling the sequence of your classes.

Taking coursework during the summer session may also be an option to accelerate your degree path.

See Core Curriculum Program section (<https://catalog.biola.edu/academic-policies/undergraduate-core-curriculum-program/>) for a list of approved Core Curriculum courses.

- **Exercise Science (p. 5)**
- **Health and Human Performance (p. 5)**

## Kinesiology, B.S. Exercise Science (KHES)

**First Year**

Fall	Credits Spring	Credits
HNRS 101	4 HNRS 105	4
HNRS 102	4 HNRS 106	4
CHEM 107 (if needed per Department)	3 BIOS 254	4
GNST 102	1 CHEM 105 & CHEM 115	4
Foreign Language (see Core Curriculum)	4	

**16** **16**

**Second Year**

Fall	Credits Spring	Credits
HNRS 210	4 HNRS 230	4
HNRS 215	4 HNRS 231	4
KNES 213 (fulfills Kinesiology and Health Science Core Curriculum requirement)	3 BIOS 281	4
MATH 210 or 318 (fulfills Mathematics Core Curriculum requirement)	3 KNES 307	3
PHSC 111 or 100	3 PSYC 200	3
PHSC 117	1	

**18** **18**

**Third Year**

Fall	Credits Spring	Credits
HNRS 324	4 HNRS 337	4
HNRS 326	2 HNRS 339	2
KNES 301	3 KNES 302	3
Major Elective	3 KNES 303	1
Major Elective	3 KNES 480, 485, or 490	1
Writing Competency Requirement ( <a href="https://catalog.biola.edu/academic-policies/undergraduate-requirements-policies/#WritingCompetencyRequirement">https://catalog.biola.edu/academic-policies/undergraduate-requirements-policies/#WritingCompetencyRequirement</a> )	Major Elective (upper-division)	3

**15** **14**

**Fourth Year**

Fall	Credits Spring	Credits
HNRS 443	4 HNRS 458	4
KNES 329	3 BBST 465	3
KNES 446	3 KNES 402	3
KNES 447	1 KNES 422	3
KNES 480, 485, or 490	1 KNES 423	1
Major Elective (upper-division)	3 KNES 440	3
Major Elective (upper-division)	3	

**18** **17**

**Total Credits 132**

## Kinesiology, B.S. Health and Human Performance (KHHP)

**First Year**

Fall	Credits Spring	Credits
HNRS 101	4 HNRS 105	4
HNRS 102	4 HNRS 106	4
CHEM 107 (if needed per Department)	3 BIOS 254	4
GNST 102	1 CHEM 105 & CHEM 115 (CHEM 120 & CHEM 121)	4

Foreign Language (see Core Curriculum)	4		
	<b>16</b>		<b>16</b>
<b>Second Year</b>			
<b>Fall</b>		<b>Credits Spring</b>	<b>Credits</b>
HNRS 210		4 HNRS 230	4
HNRS 215		4 HNRS 231	4
KNES 213 (fulfills Kinesiology and Health Science Core Curriculum requirement)		3 BIOS 281	4
MATH 210 or 318 (fulfills Mathematics Core Curriculum requirement)		3 PSYC 200	3
PHSC 111, 100, 117, BIOS 111, BIOS 113, BIOS 112, BIOS 114, or BIOS 282		4 Major Elective	3
	<b>18</b>		<b>18</b>
<b>Third Year</b>			
<b>Fall</b>		<b>Credits Spring</b>	<b>Credits</b>
HNRS 324		4 HNRS 337	4
HNRS 326		2 HNRS 339	2
KNES 301		3 KNES 302	3
KNES 337		3 KNES 303	1
KNES 351		3 Major Elective (upper-division)	3
KNES 480, 485, or 490		1	
Writing Competency Requirement ( <a href="https://catalog.biola.edu/academic-policies/undergraduate-requirements-policies/#WritingCompetencyRequirement">https://catalog.biola.edu/academic-policies/undergraduate-requirements-policies/#WritingCompetencyRequirement</a> )			
	<b>16</b>		<b>13</b>
<b>Fourth Year</b>			
<b>Fall</b>		<b>Credits Spring</b>	<b>Credits</b>
HNRS 443		4 HNRS 458	4
KNES 329		3 BBST 465	3
KNES 401		3 KNES 434	3
KNES 446		3 KNES 440	3
KNES 447		1 KNES 449	3
KNES 480, 485, or 490		1	
Major Elective (upper-division)		3	
	<b>18</b>		<b>16</b>
<b>Total Credits 131</b>			