

# KINESIOLOGY (BS) - EXERCISE SCIENCE CONCENTRATION

## Program Overview

The B.S Kinesiology degree with a concentration in Exercise Science is designed to accommodate a broad range of student interests and professional goals including careers in the health and fitness industry and graduate work in physical therapy, occupational therapy, exercise science / physiology, or other allied health professions. The program offers thorough and rigid core of theoretical and practical courses balanced with flexibility through program electives.

## Career Opportunities

The Exercise Science concentration of the B.S. Kinesiology degree is designed to accommodate a broad range of student interests and professional goals including careers in the health and fitness industry or graduate work in physical therapy, occupational therapy, or exercise science.

## Program of Study

Code	Title	Credit Hours
<b>Core IMPACTS Area : Institutional Priorities <sup>1</sup></b>		<b>4-5</b>
Choose one of the following communication options		3
COMM 1110	Public Speaking	
Foreign Language Course Options		
AMSL, ARAB, CHIN, FREN, GERM, GREK, ITAL, JAPN, KREN, LATIN, PORT, SPAN - 1001, 1002, 2001, 2002; SWAH - 1001, 1002.		
Take one of the following courses		1-2
ITDS 1779	Scholarship Across the Disciplines	
LEAD 1705	Introduction to Servant Leadership	
PERS 1506	Perspectives 1-hour	
PERS 1507	Perspectives 2-hour	
<b>Core IMPACTS Area : Mathematics &amp; Quantitative Skills <sup>1</sup></b>		<b>3-7</b>
DATA 1501	Introduction to Data Science	3
MATH 1001	Quantitative Skills and Reasoning	3
MATH 1101	Introduction to Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1113	Pre-Calculus	4
MATH 1125	Applied Calculus	3
MATH 1131	Calculus with Analytic Geometry I	4
MATH 1132	Calculus with Analytic Geometry II	4
MATH 1165	Computer-Assisted Problem Solving	3
MATH 1401	Introduction to Statistics	3
MATH 1501	Calculus I	4
MATH 2125	Introduction to Discrete Mathematics	3
STAT 1401	Elementary Statistics	3
<b>Core IMPACTS Area : Political Science and U.S. History</b>		<b>6</b>
HIST 2111	U. S. History to 1865	3
or HIST 2112	U. S. History since 1865	
POLS 1101	American Government	3

<b>Core IMPACTS Area : Arts, Humanities, and Ethics</b>		<b>6</b>
Select one Fine Arts course		3
ARTH 1100	Art Appreciation	
ARTH 2125	Introduction to the History of Art I– Prehistoric through Gothic	
ARTH 2126	Introduction to the History of Art II– Renaissance through Modern	
MUSC 1100	Music Appreciation	
THEA 1100	Theatre Appreciation	
ITDS 1145	Comparative Arts <sup>2</sup>	
Select one Humanities course		3
ENGL 2111	World Literature I	
ENGL 2112	World Literature II	
ITDS 1155	The Western Intellectual Tradition	
ITDS 1774	Introduction to Digital Humanities	
PHIL 2010	Introduction to Philosophy	
ITDS 1145	Comparative Arts <sup>2</sup>	
<b>Core IMPACTS Area : Communicating in Writing</b>		<b>6</b>
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
<b>Core IMPACTS Area : Technology, Mathematics, and Sciences <sup>1,3</sup></b>		<b>7-11</b>
ANTH 1145	Human Origins	3
ASTR 1105	Descriptive Astronomy: The Solar System	3
ASTR 1106	Descriptive Astronomy: Stars and Galaxies	3
ASTR 1305	Descriptive Astronomy Lab	1
ATSC 1112	Understanding the Weather	3
ATSC 1112L	Understanding the Weather Lab	1
BIOL 1125	Contemporary Issues in Biology Non-Lab	3
BIOL 1215K	Introductory Biology	4
BIOL 1225K	Contemporary Issues in Biology with Lab	4
CHEM 1151 & 1151L	Survey of Chemistry I and Survey of Chemistry I Lab	4
CHEM 1152 & 1152L	Survey of Chemistry II and Survey of Chemistry II Lab	4
CHEM 1211 & 1211L	Principles of Chemistry I and Principles of Chemistry I Lab	4
CHEM 1212 & 1212L	Principles of Chemistry II and Principles of Chemistry II Lab	4
CPSC 1105	Introduction to Computing Principles and Technology	3
CPSC 1301K	Computer Science I	4
ENVS 1105	Environmental Studies	3
ENVS 1105L	Environmental Studies Laboratory	1
ENVS 1205K	Sustainability and the Environment	4
GEOG 2215	Introduction to the Geographic Information Systems	3
GEO 1110	Natural Disasters: Our Hazardous Environment	3
GEO 1121	Introductory Geoscience I: Physical Geology	3
GEO 1121L	Introductory Geoscience I: Physical Geology Lab	1
GEO 1122	Introductory Geo-sciences II: Historical Geology	3
GEO 1322	Introductory Geo-sciences II: Historical Geology Lab	1
GEO 2225	The Fossil Record	4

PHYS 1111 & PHYS 1311	Introductory Physics I and Introductory Physics I Lab	4	CHEM 1151 & 1151L	Survey of Chemistry I and Survey of Chemistry I Lab	
PHYS 1112 & PHYS 1312	Introductory Physics II and Introductory Physics II Lab	4	CHEM 1152 & 1152L	Survey of Chemistry II and Survey of Chemistry II Lab	
PHYS 1125	Physics of Color and Sound	3	CHEM 1211 & 1211L	Principles of Chemistry I and Principles of Chemistry I Lab	
PHYS 1325	Physics of Color and Sound Lab	1	CHEM 1212 & 1212L	Principles of Chemistry II and Principles of Chemistry II Lab	
PHYS 2211 & PHYS 2311	Principles of Physics I and Principles of Physics I Lab	4	PHYS 1111 & PHYS 1311	Introductory Physics I and Introductory Physics I Lab	
PHYS 2212 & PHYS 2312	Principles of Physics II and Principles of Physics II Lab	4	PHYS 1112 & PHYS 1312	Introductory Physics II and Introductory Physics II Lab	
<b>Core IMPACTS Area : Social Sciences</b>		<b>6</b>	BIOL 1215K	Introductory Biology	
Select one Behavioral Science course			BIOL 1107K	Principles of Biology I	
ECON 2105	Principles of Macroeconomics		BIOL 1108K	Principles of Biology II	
ECON 2106	Principles of Microeconomics		BIOL 2260K	Foundations of Microbiology	
PHIL 2030	Moral Philosophy		MATH 1113	Pre-Calculus	
PSYC 1101	Introduction to General Psychology		MATH 1125	Applied Calculus	
SOCI 1101	Introduction to Sociology		MATH 1401	Introduction to Statistics	
Select one World Cultures course		3	PSYC 1101	Introduction to General Psychology	
ANTH 1107	Discovering Archaeology		PSYC 2103	Lifespan Developmental Psychology	
ANTH 1105	Cultural Anthropology		SOCI 1101	Introduction to Sociology	
ANTH 2105	Ancient World Civilizations		<b>Field of Study Requirements Total</b>		<b>18</b>
ANTH 2136	Language and Culture		<b>Required for the Major</b>		
ENGL 2136	Language and Culture		<b>Kinesiology Core Requirements</b>		
GEOG 1101	World Regional Geography		KINS 1105	Introduction to Kinesiology	3
HIST 1111	World History to 1500		HESC 2105	Personal Health	3
HIST 1112	World History since 1500		KINS 2105	Weight Control	2
ITDS 1156	Understanding Non-Western Cultures		KINS 3135	Kinesiology	3
<b>Core IMPACTS Total Hours</b>		<b>42</b>	KINS 4131	Exercise Physiology	3
<b>Health and Wellness</b>		<b>3</b>	KINS 4331	Exercise Physiology Laboratory	1
KINS 1106	Lifetime Wellness	2	<b>Exercise Science Concentration Requirements</b>		
or PHED 1205	Concepts of Fitness		KINS 4232	Exercise Testing	3
Select one of the following		1	KINS 4133	Exercise Prescription	3
Any PEDS course			KINS 4137	Nutritional Bases of Human Performance	3
MUSC 1206	Body Mapping (Music Majors Only)		KINS 4146	Measurement and Evaluation in Kinesiology	3
			KINS 4147	Organization and Administration	3
			KINS 4698	Internship / Practicum	6
			KINS 5212U	Principles of Strength and Conditioning	3
			<b>Required for the Major Total</b>		<b>39</b>
			<b>Major Electives</b>		
			Select 9 hours from the following courses (course availability will vary):		9
			KINS 3107	Psychology of Exercise	
			KINS 3232	Exercise Leadership	
			KINS 4135	Pathophysiology for Exercise Science Professions	
			KINS 5133U	Pharmacological Considerations for Exercise Testing and Training	
			KINS 5135U	Program Design in Kinesiology and Health	
			KINS 5136U	Environmental Stress and Exercise	
			KINS 5145U	Motor Learning and Performance	
			KINS 5137U	Electrocardiography	
			KINS 5545U	Selected Topics in Kinesiology	

<sup>1</sup> The hours applied in the Institutional Priorities; Mathematics & Quantitative Skills; and Technology, Mathematics, and Sciences areas must add to 18 credit hours.

<sup>2</sup> ITDS 1145 Comparative Arts, though listed under both Fine Arts and Humanities, may be taken only once.

<sup>3</sup> At least 4 of the credit hours in this area must be in a lab science course.

## Major Requirements

Code	Title	Credit Hours
<b>Core Requirements</b>		
Complete the core requirements for this program		45
<b>Field of Study Requirements</b>		
BIOL 2251K	Anatomy & Physiology I	4
BIOL 2252K	Anatomy & Physiology II	4
ITDS 2106	Medical Terminology	3
Seven hours of approved electives including at least one 4-hour science with lab.		7

Major Electives Total	9
<b>General Electives</b>	
Select 12 credits of general electives (hours for an academic minor can also apply)	
General Electives Total	12
<b>Total Credit Hours</b>	<b>123</b>

## Program Map

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 1101	English Composition I (minimum grade of C)	3
Math and Quantitative Skills	MATH <sup>1</sup>	3
Technology, Mathematics, and Science	CHEM (recommended for Science with Lab) (minimum grade of C for CHEM) <sup>2</sup>	4
KINS 1106 or PHED 1205	Lifetime Wellness or Concepts of Fitness	2
Institutional Options	ITDS 1779 (2), LEAD 1705 (2), PERS 1506 (1; may be repeated with different topic), PERS 1507 (2)	1
KINS 1105	Introduction to Kinesiology (minimum grade of C)	3
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 1102	English Composition II (minimum grade of C)	3
Technology, Mathematics, and Sciences	Science with Lab <sup>3</sup>	4
POLS 1101	American Government	3
Social Studies	Behavior Science	3
Institutional Options	COMM 1110 Public Speaking or foreign language 1001, 1002, 2001, 2002	3
<b>Credit Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Arts, Humanities, and Ethics	Humanities	3
Social Studies	World Cultures	3
BIOL 2251K	Anatomy & Physiology I (minimum grade of C)	4
KINS 2105	Weight Control (minimum grade of C)	2
ITDS 2106	Medical Terminology (minimum grade of C)	3
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
Technology, Mathematics, and Sciences	Math/Science/Tech <sup>4</sup>	3
HESC 2105	Personal Health (minimum grade of C)	3

BIOL 2252K	Anatomy & Physiology II (minimum grade of C)	4
General Electives	Elective	3
HIST 2111 or HIST 2112	U. S. History to 1865 or U. S. History since 1865	3
<b>Credit Hours</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
KINS 4331	Exercise Physiology Laboratory (minimum grade of C)	1
KINS 4131	Exercise Physiology (minimum grade of C)	3
KINS 4146	Measurement and Evaluation in Kinesiology (minimum grade of C)	3
Field of Study	Science with Lab (minimum grade of C)	4
Arts, Humanities, and Ethics	Fine Arts	3
PEDS Elective		1
Program Electives	Elective (minimum grade of C)	3
<b>Credit Hours</b>		<b>18</b>

<b>Spring</b>		
KINS 3135	Kinesiology (minimum grade of C)	3
KINS 4232	Exercise Testing (minimum grade of C)	3
KINS 4137	Nutritional Bases of Human Performance (minimum grade of C)	3
General Electives	Elective	3
Field of Study	Math/science (minimum grade of C)	3
<b>Credit Hours</b>		<b>15</b>

<b>Fourth Year</b>		
<b>Fall</b>		
Program Electives	Elective (minimum grade of C)	3
KINS 4147	Organization and Administration (minimum grade of C) (Required for Major)	3
KINS 5212U	Principles of Strength and Conditioning (minimum grade of C)	3
General Electives	Electives	6
<b>Credit Hours</b>		<b>15</b>

<b>Spring</b>		
KINS 4698	Internship / Practicum (minimum grade of C) <sup>5</sup>	6
Program Electives	Electives (minimum grade of C)	3
KINS 4133	Exercise Prescription (minimum grade of C)	3
<b>Credit Hours</b>		<b>12</b>
<b>Total Credit Hours</b>		<b>123</b>

<sup>1</sup> Based on placement score; MATH 1111 College Algebra is recommended.

<sup>2</sup> CHEM 1151 Survey of Chemistry I or CHEM 1211 Principles of Chemistry I should be taken in consultation with advisor based on professional goals. CHEM 1151 Survey of Chemistry I/CHEM 1152 Survey of Chemistry II with labs is satisfactory for fitness / wellness options. CHEM 1211 Principles of Chemistry I/CHEM 1212 Principles

of Chemistry II with labs is necessary for most pre-professional options (PT, PA, and some OT).

<sup>3</sup> Technology, Mathematics, and Sciences area: Science with Lab based on professional goals (consult with advisor).

<sup>4</sup> Technology, Mathematics, and Sciences area: STAT 1401 Elementary Statistics is recommended.

<sup>5</sup> Internship requires approval.

Note: Students must have a minimum of 39 semester hours numbered 3000 or higher.

Degree progress is personalized to help student meet educational/occupational goals (most notably with selection of program electives).

## Admission Requirements

Students transferring into the Exercise Science program from another degree program at Columbus State University or from another institution must have a minimum overall grade point average of 2.50 based on a 4.0 scale. Individuals must obtain a change of major form from the Department Chair before entering the program.

## Additional Program Requirements

KINS courses in the Field of Study Requirements, Required for the Major, and Major electives must be completed with a minimum grade of "C" or better.

KINS 4131 Exercise Physiology and KINS 3135 Kinesiology may only be repeated twice. Students may only earn a D, F, or WF from these courses once; earning a D, F, or WF more than once in either of these courses will make a student ineligible to complete the exercise science concentration.