

# HEALTH SCIENCE (BS)

## Program Overview

The Bachelor of Science in Health Science is designed as a fundamental health-related degree that will enable students to pursue a variety of careers related to our population's health status. Graduates will have the basic skills and knowledge needed to become an asset to the health care community. Students are encouraged to become nationally recognized certified health education specialists (CHES) through the National Commission for Health Education Credentialing ([www.nchec.org](http://www.nchec.org)) (<http://www.nchec.org>). Students are also encouraged to advance their education at one of the Programs or Schools of Public Health. The website is <http://www.aspph.org/> for more information. There are a variety of opportunities for students majoring in Health Science.

## Career Opportunities

There are a variety of opportunities for students majoring in Health Science. Possible career paths include:

- Medicine (Physician or Physician's Assistant)
- Occupational Therapy
- Physical Therapy
- Environmental health
- Behavioral sciences-health education
- Epidemiology
- Health service administration
- Maternal and child health
- Nutrition
- International-global health
- Community outreach
- Research
- Counseling

Students must understand that some allied health professions require additional certification or other designated criteria along with their educational degree in health science.

## Program of Study

Code	Title	Credit Hours
<b>Core IMPACTS Area : Institutional Priorities <sup>1</sup></b>		<b>4-5</b>
COMM 1110	Public Speaking	3
ITDS 1779	Scholarship Across the Disciplines	2
LEAD 1705	Introduction to Servant Leadership	2
PERS 1506	Perspectives 1-hour	1
PERS 1507	Perspectives 2-hour	2
Foreign Language Course Options		
ARAB, CHIN, FREN, GERM, GREK, ITAL, JAPN, KREN, LATIN, PORT, SPAN - 1001, 1002, 2001, 2002		
SWAH 1001	Elementary Swahili I	
SWAH 1002	Elementary Swahili II	
<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 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</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	Survey of Chemistry I	4
& 1151L	and Survey of Chemistry I Lab	
CHEM 1152	Survey of Chemistry II	4
& 1152L	and Survey of Chemistry II Lab	
CHEM 1211	Principles of Chemistry I	4
& 1211L	and Principles of Chemistry I Lab	
CHEM 1212	Principles of Chemistry II	4
& 1212L	and Principles of Chemistry II Lab	
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
GEOL 1110	Natural Disasters: Our Hazardous Environment	3
GEOL 1121	Introductory Geoscience I: Physical Geology	3
GEOL 1121L	Introductory Geoscience I: Physical Geology Lab	1
GEOL 1122	Introductory Geo-sciences II: Historical Geology	3
GEOL 1322	Introductory Geo-sciences II: Historical Geology Lab	1
GEOL 2225	The Fossil Record	4
PHYS 1111 & PHYS 1311	Introductory Physics I and Introductory Physics I Lab	4
PHYS 1112 & PHYS 1312	Introductory Physics II and Introductory Physics II Lab	4
PHYS 1125	Physics of Color and Sound	3
PHYS 1325	Physics of Color and Sound Lab	1
PHYS 2211 & PHYS 2311	Principles of Physics I and Principles of Physics I Lab	4
PHYS 2212 & PHYS 2312	Principles of Physics II and Principles of Physics II Lab	4
<b>Core IMPACTS Area : Social Sciences</b>		<b>6</b>
Select one Behavioral Science course		
ECON 2105	Principles of Macroeconomics	
ECON 2106	Principles of Microeconomics	
PHIL 2030	Moral Philosophy	
PSYC 1101	Introduction to General Psychology	
SOCI 1101	Introduction to Sociology	
Select one World Cultures course		
ANTH 1107	Discovering Archaeology	3
ANTH 1105	Cultural Anthropology	
ANTH 2105	Ancient World Civilizations	
ANTH 2136	Language and Culture	
ENGL 2136	Language and Culture	
GEOG 1101	World Regional Geography	
HIST 1111	World History to 1500	
HIST 1112	World History since 1500	
ITDS 1155	The Western Intellectual Tradition	
ITDS 1156	Understanding Non-Western Cultures	

**Core IMPACTS Total Hours** **42**

**Health and Wellness** **3**

KINS 1106 Lifetime Wellness 2

or PHED 1205 Concepts of Fitness

Select one PEDS course (<https://catalog.columbusstate.edu/course-descriptions/peds/#peds>)

<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.

## Major Requirements

Code	Title	Credit Hours
<b>Core Requirements</b>		
Complete the core requirements for this program		45
<b>Area F Courses Related to Major</b>		
Minimum grade of C is required		
BIOL 2251K	Anatomy & Physiology I	4
BIOL 2252K	Anatomy & Physiology II	4
BIOL 2260K	Foundations of Microbiology	4
HESC 2105	Personal Health	3
HESC 2125	Applied Nutrition	3
Area F Total		18
<b>Area G Program Requirements</b>		
Minimum grade of C is required		
HESC 1105	Introduction to the Health Professions	1
HESC 3105	Survey of Environmental Health	3
HESC 4106	Methods and Materials in Health Education	3
HESC 4145	Working with Families	3
HESC 5107U	Human Sexuality	3
HESC 4115	Principles of Epidemiology	3
HESC 5187U	Research Methods for the Health Professions	3
HESC 5795U	Seminar in Alcohol and Drug Abuse	3
STAT 3127	Statistical Computing	3
Area G Total		25
<b>Area H Program Electives</b>		
Minimum grade of C is required in each HESC course		
Select 24 credits from the following: <sup>1</sup>		24
BIOL 1231K	General Biology I	
BIOL 1232K	General Biology II	
CHEM 1212 & 1212L	Principles of Chemistry II and Principles of Chemistry II Lab	
ENGL 3158	Writing in the Workplace	
KINS 3135	Kinesiology	
HESC 3165	Working with the Aged	
HESC 4107	Fundamentals of School Health	
HESC 4129	Death and Dying	
HESC 4698	Internship	
HESC 4795	Seminar in Health Science	
HESC 4899	Independent Study	
HESC 5106U	Behavioral Determinants of Health and Disease	
HESC 5108U	Consumer Health	
HESC 5109U	Grant Writing for the Health Professions	
HESC 5188U	Contemporary Health Problems	
ITDS 2106	Medical Terminology	
MATH 1113	Pre-Calculus	
PHYS 1111 & PHYS 1311	Introductory Physics I and Introductory Physics I Lab	
Area H Total		24
<b>Area I General Electives</b>		
Select 11 credits		11

Area I Total	11
<b>Total Credit Hours</b>	<b>123</b>

<sup>1</sup> Out of the course options below, 15-18 credits must be 3000 level courses or above in order to meet the 39 hour upper level graduation requirement.

## Program Map

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 1101	English Composition I (minimum grade of C)	3
MATH 1111	College Algebra (minimum grade of C)	3
HESC 2105	Personal Health (minimum grade of C)	3
Area B1	COMM 1110 Public Speaking or foreign language 1001, 1002, 2001, 2002	3
Select one of the following:		4
CHEM 1211 & 1211L	Principles of Chemistry I and Principles of Chemistry I Lab (minimum grade of C)	
CHEM 1151 & 1151L	Survey of Chemistry I and Survey of Chemistry I Lab (minimum grade of C)	
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 1102	English Composition II (minimum grade of C)	3
HESC 2125	Applied Nutrition (minimum grade of C)	3
Area C	Fine Arts Elective	3
BIOL 1215K	Introductory Biology (minimum grade of C)	4
PEDS 1307	Jogging for Fitness <sup>1</sup>	1
Area B2	ITDS 1779 (2), LEAD 1705 (2), PERS 1506 (1; may be repeated with different topic), PERS 1507 (2)	1
HESC 1105	Introduction to the Health Professions (minimum grade of C)	1
<b>Credit Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
HIST 2111 or HIST 2112	U. S. History to 1865 or U. S. History since 1865	3
BIOL 2260K	Foundations of Microbiology	4
AREA C	Humanities	3
KINS 1106 or PHED 1205	Lifetime Wellness or Concepts of Fitness	2
POLS 1101	American Government	3
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
AREA E	Behavioral Science	3
AREA E	World Cultures course (such as ITDS 1156 Understanding Non-Western Cultures) <sup>1</sup>	3

STAT 1401	Elementary Statistics (minimum grade of C; Area D course)	3
Area I	General Electives	3
BIOL 2251K	Anatomy & Physiology I (minimum grade of C)	4

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**Credit Hours** **16**

### Third Year

#### Fall

BIOL 2252K	Anatomy & Physiology II (minimum grade of C)	4
AREA H	Advisor Approved Elective (minimum grade of C) <sup>1</sup>	3
HESC 5795U	Seminar in Alcohol and Drug Abuse (minimum grade of C)	3

HESC 4145	Working with Families (minimum grade of C)	3
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Area I	General Electives	3
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**Credit Hours** **16**

#### Spring

HESC 5187U	Research Methods for the Health Professions (minimum grade of C)	3
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HESC 4107	Fundamentals of School Health (minimum grade of C) <sup>1</sup>	3
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Area H	Program Electives (minimum grade of C)	3
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Area I	General Elective	3
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Area I	General Elective	2
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**Credit Hours** **14**

### Fourth Year

#### Fall

HESC 4115	Principles of Epidemiology (minimum grade of C)	3
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ENGL 3158	Writing in the Workplace (minimum grade of C) <sup>1</sup>	3
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HESC 5107U	Human Sexuality (minimum grade of C)	3
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HESC 5106U	Behavioral Determinants of Health and Disease (minimum grade of C) <sup>1</sup>	3
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HESC 4106	Methods and Materials in Health Education (minimum grade of C)	3
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**Credit Hours** **15**

#### Spring

HESC 5108U	Consumer Health (minimum grade of C) <sup>1</sup>	3
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HESC 4698	Internship (minimum grade of C) <sup>1</sup>	3
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HESC 3105	Survey of Environmental Health (minimum grade of C)	3
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STAT 3127	Statistical Computing (minimum grade of C)	3
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HESC 5188U	Contemporary Health Problems (minimum grade of C) <sup>1</sup>	3
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**Credit Hours** **15**

**Total Credit Hours** **123**

<sup>1</sup> Denotes example and is subject to student interest.

• To count toward graduation, all grades must be "C" or better of courses in Areas A, D, F, G, and H.

- Many graduate programs require an entrance examination. Students should take this exam prior to applying for graduate programs.
- Students should work with their advisor to ensure all required courses are taken for the graduate program of choice
- PHED 1205 Concepts of Fitness is required for all students unless they are over the age of 40, a prior military service member, or have a documented disability.

## **Admission Requirements**

Students must have a grade point average of at least 2.5 or higher to transfer into the Health Science major.

## **Additional Program Requirements**

- Students must earn a grade of C or above in all science, math, and health science courses located in Areas F, G, and H of the curriculum in order to be eligible for graduation.
- Students must confirm their course selection each semester with an Academic Advisor.