# **COLLEGE OF HEALTH AND NATURAL SCIENCE**

## **Health Science**

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#### A Bachelor of Science degree is offered in Health Sciences to traditional students.

The mission of the Health Sciences major is to prepare students for entry into graduate programs including Physical Therapy, Nursing, Occupational Therapy, Physician Assistant, Medical School, Dental School, Veterinary School and others. The wide variety of course offerings will also allow students to explore careers in public health agencies, research, healthcare management, science writing, elder services, health education, wellness services, human services, health insurance, and pharmaceutical sales.

The curriculum develops critical thinking skills, the ability to use the medical and basic scientific primary literature, a broad biomedical knowledge base, and a clear understanding of the requirements necessary to succeed in the application to graduate schools in healthcare related fields. Students interested in careers and graduate programs in healthcare are encouraged to meet with a member of the Health Sciences Advising Committee early in their program. Faculty members of this committee will assist the student in self-assessment, development of career goals, and construction of a realistic plan for the student's successful attainment of their goals.

#### Accelerated Bachelor of Science degree in Health Science

Franklin Pierce offers motivated students the opportunity to complete their undergraduate Health Science degrees in just three years. Students completing their undergraduate degrees through the Accelerated Program save a year's tuition and fees and enter the job market earlier or can choose to apply to our graduate program a year earlier. Several accelerated options are available to new and continuing students who have a record of strong academic achievement and a desire to advance their education.

Personalized schedules are available to student athletes and those with work or volunteer commitments so students can take advantage of all that Franklin Pierce has to offer. The following options are available:

#### 3-year Accelerated Health Science degree

Complete your undergraduate Health Science degree in three years.

## 3+2.5 Accelerated Health Science degree + Doctor of Physical Therapy

Complete your undergraduate Health Science degree in three years and the Doctor of Physical Therapy degree in 2.5 years.

#### 4+2.5 Traditional Health Science degree + Doctor of Physical Therapy

Complete your undergraduate Health Science degree in four years and the Doctor of Physical Therapy degree in 2.5 years.

#### 3+2 Accelerated Health Science degree + Master of Physician Assistant Studies

Complete your undergraduate Health Science degree in three years and the Master of Physician Assistant Studies in 2 years.

## 4+2 Traditional Health Science degree + Master of Physician Assistant Studies

Complete your undergraduate Health Science degree in four years and the Master of Physician Assistant Studies in 2 years.

#### 3+1.5 Accelerated Health Science degree + Master's Entry to Practice Nursing

Complete your undergraduate Health Science degree in three years and the Master's Entry to Practice Nursing in 1.5 years.

#### 4+1.5 Traditional Health Science degree + Master's Entry to Practice Nursing

Complete your undergraduate Health Science degree in four years and the Master's Entry to Practice Nursing in 1.5 years.

# **Major Reqirements**

## **Applying to the Accelerated Health Science Programs**

- Minimum cumulative grade point average (CGPA), in academic courses only, of a 3.0 on a 4.0 scale (84/100)
- Equivalent of four years of math with a final grade of B+ (87/100) or higher in each class
- Equivalent of four years of science with a final grade of B+ (87/100) or higher in each class
- Demonstrated leadership through community and school activities; related healthcare experience is highly desirable.

### **Accelerated Health Science Requirements**

To be eligible for a Health Science degree, students must fulfill the major and GLE requirements. In addition, the following are the program requirements for students admitted into the accelerated programs:

- Maintain a minimum cumulative grade point average of 3.2.
- Obtain no less than a "B" in all of the Health Science major requirements.

In the event that students do not meet these requirements they will be transitioned into our standard Health Science program.

#### **Health Science Curriculum**

The curriculum for the accelerated and traditional Health Science program is the same, the difference being that the accelerated program requires course work to be completed over the summer terms.

The Health Science program is able to accommodate prerequisites for the DPT, MPAS, and MEPN program. You do not need to determine the specific graduate program you wish to pursue until the spring semester of your junior year, this is where the program prerequisites diverge. Since the Health Science program incorporates elective courses in their curriculum, we have suggested courses which will directly benefit that chosen graduate profession.

#### All Health Sciences majors take the following major requirements (40 credits):

In addition to all graduation requirements, the following courses must be completed successfully:

BI101-102	Biology I and II (laboratory) 8 credits
BI215	Biology and Health Sciences Seminar 3 credits
BI235	Human Health and Nutrition 3 credits
BI260	Human Anatomy & Physiology I 4 credits
BI261	Human Anatomy & Physiology II 4 credits
BI370	Medical Terminology and Health Systems 3 credits
BI400	Kinesiology (laboratory) 4 credits or
BI402	Exercise Physiology (laboratory) 4 credits
BI460	Internship in Biology or
BI480	Senior Seminar in Biology/Health Sciences or
BI481	Invited Senior Research 3 credits
CH101-102	General Chemistry I & II (laboratory) 8 credits

#### **Health Sciences Electives**

In addition to the major requirements, students must choose 20 elective credits with a minimum of 6 credits above the 300-level from the list below:

AN325 Medical Anthropology

BI261 Anatomy & Physiology II (laboratory)

**BI302 Food Production** 

**BI310 Research Methods** 

BI325 Microbiology (laboratory)

BI326 Parasitology

BI327 Principles of Immunology

**BI329 Special Topics** 

**BI337 Advanced Nutrition** 

BI351 Endocrinology

BI353 Introduction to Pharmacology

BI400 Kinesiology/Biomechanics (laboratory)

BI402 Physiology of Exercise (laboratory)

BI403 Assessment and Prescription of Fitness

BI404 Strength and Conditioning Science

CH211 Organic Chemistry 1

CH212 Organic Chemistry 2

CH321 Biochemistry (laboratory)

ES305 Health, Human Rights, and Environmental Justice

**HCA315** Epidemiology

HCA340 Healthcare Finance

HCA350 Healthcare Systems Management and Quality Improvement

HCA360 Healthcare Ethics, Policy, and Law

HCA390 Internship

HCA450 Leadership and Management in Healthcare Organizations

PH101 Physics 1

PH102 Physics 2

PS304 Introduction to Neuroscience (laboratory)

PS430 Introduction to Psychopharmacology

PUBH303 Biostatistics

PUBH310 Foundations of Environmental Health Sciences

PUBH313 Psychological, Behavioral, and Social Issues in Public Health

## **Recommended Curriculum Guide - Health Sciences**

First Year					
Fall Semester		Credits	Spring Semeste	Spring Semester	
BI101	Biology I (laboratory)	4	BI102	Biology II (laboratory)	4
	GLE Elective	3	MT260	Statistics	3
PS101	Intro to Psychology	3		GLE Elective	3
GLE101	First-Year Inquiry	3		GLE Elective	3
GLE110	First-Year Composition	3		GLE Elective	3
	Total	16		Total	16
Second Year	,				
Fall Semester		Credits	Spring Semeste	Spring Semester	
B235	Human Health and Nutrition	3	BI215	Biology and Health Sciences Seminar	3
BI260	Human Anatomy & Physiology I (Laboratory)	4	GLE230	Second-Year Composition	3
CH101	Chemistry I (laboratory)	4	CH102	Chemistry II (laboratory)	4
	GLE Elective  Elective	3	BI261	Human Anatomy & Physiology II (laboratory)	4
	Total	17		Total	14
Third Year					
Fall Semester		Credits	Spring Semeste	? <b>r</b>	Credits
BI370	Medical Terminology and Health Systems	3		Health Sciences Elective	4
BI400 or 402	Kinesiology (laboratory) or	4		Health Sciences Elective	4

	Exercise Physiology				
	GLE Elective	3	BI460 or 480 or 481	Internship in Biology or  Senior Seminar in Biology or Senior Seminar in Biology/ Health Sciences or Invited Senior Research	3
	Health Sciences Elective	4		Elective	3
	Total	14		Total	14
Fourth Year					
Fall Semester		Credits	Spring Semester		Credits
	Health Sciences Elective	4		Health Sciences Elective	4
	Health Sciences Elective	3		Elective	3
	Elective	3		GLE Elective	3
	Elective	3		Elective	3
	Elective	3		Total	13
	Total	16		Total Credits	120

## **Accelerated 3 Year Health Science Curriculum**

First Year						
Fall Semester		Credits	Spring Semest	Spring Semester		
BI101	Biology I (laboratory)	4	BI102	Biology II (laboratory)	4	
CH101	Chemistry I (laboratory)	4	MT260	Statistics	3	
PS101	Intro to Psychology	3	CH102	Chemistry [1] (laboratory)	4	
GLE101	First-Year Inquiry	3		GLE Elective	3	
GLE110	First-Year Composition	3		GLE Elective	3	
	Total	17		Total	17	
Second Year	,		-	-	_	
Summer Cours	ses				_	

Fall Semester		Credits	Spring Semester		Credits
B235	Human Health and Nutrition	3	BI215	Biology and Health Sciences Seminar	3
BI260	Human Anatomy & Physiology I (Laboratory)	4	GLE230	Second-Year Composition	3
	Health Science Elective	4		Health Science Elective	4
	Elective	3	BI261	Human Anatomy &	4
				Physiology II (laboratory)	
	Elective	3		Elective	3
	Total	17		Total	17
Third Year					
Summer Courses					
Fall Semester		Credits	Spring Semester		Credits
BI370	Medical Terminology and Health Systems	3		Health Sciences Elective	4
BI400 or 402	Kinesiology (laboratory) or Exercise Physiology	4		Health Sciences Elective	4
	Elective	3		Elective	3
	Health Sciences Elective	4		Elective	3
	Elective	3		Elective	3
	Total	17		Total	16
				Total Credits	120

## **Program Courses**