

# Health Science

## at Benedictine University

### Why study health science at Benedictine?

If you are interested in a health-related career and want a challenging yet flexible academic preparation, you may choose to major in health science at Benedictine University. Our program offers you the opportunity to design your curriculum with more freedom and flexibility than is the case with most majors. It prepares you for further study for careers in physical or occupational therapy, dentistry, medicine, nursing, podiatry, veterinary medicine and other health-related professions. Before you apply for a professional school, you may benefit from 75 contact hours of practical experience in a health-related career of your choice. Benedictine University has a close working relationship with many outstanding medical facilities in the Chicago area, as well as with many individual professionals who supervise our students.

### What the health science core consists of:

- *Biology* - Principles of Organismal Biology (3 semester-hours) and Principles of Biology and Lab (4 semester-hours)
- *Chemistry* - 16 semester-hours: four courses in College Chemistry and Organic Chemistry with Labs
- *Biochemistry* - 3 semester-hours (Principles of Biochemistry or Biochemistry)
- *Physics* - 8 semester-hours: two courses in College Physics with Lab or University Physics with Lab
- *Math* - 3-4 semester-hours: College Trigonometry or placement into a higher mathematics  
Note: some health professional programs may require calculus.
- *Upper-level natural sciences* - 31 semester-hours of upper level science courses including at least 9 hours in 300-level courses and two advanced labs
- *Health Science* - 68 semester-hours of your 120 hours for graduation in health science courses with a grade of "C" or better in each course
- *Health Science Practicum* - A 2 semester-hour clinical experience in physical or occupational therapy, dentistry, podiatry, veterinary medicine, optometry or medicine is available as an elective

### How does the program work?

Benedictine University's health science major provides clinical experience for credit in at least one health science specialty. You will consult with advisors in both basic science and clinical fields regarding academic preparation and application to professional schools. Our director of pre-professional health programs and a health science recommendations committee, the latter comprised of faculty members who have intimate knowledge of the academic subject matter and the qualifications necessary to be successful in a health-related career, will help guide your path.

*"During my first year at Loyola's medical school, I realized how prepared I was compared to other students in the program. I was way ahead because Benedictine's pre-med program is so far ahead of many others. I heard Benedictine's pre-med program was good, but I didn't realize how good until I went to medical school."*

Jim Sostak, C01

# Recommended Program

## Bachelor of Science in Health Science

### FRESHMAN

Writing Colloquium	3
Mathematics (MATH 111 or higher)	3
General Chemistry I and Lab	4
Principles of Organismal Biology	3
	<b>13</b>

Research Writing	3
Speech Communication	3
Elective	3
Principles of Biology and Lab	4
General Chemistry II and Lab	4
	<b>17</b>

### JUNIOR

College Physics I and Lab	4
Cell Biology	3
Anthropology/Political Science core elective	3
Cultural Heritage (HUMN 240)	3
General electives	3
	<b>16</b>

College Physics II and Lab	4
Biochemistry	3
Science elective	3
Sociology/Psychology core elective	3
Cultural Heritage (HUMN 250)	3
	<b>16</b>

### SOPHOMORE

Organic Chemistry I and Lab	4
Genetics	3
Microbiology	4
Cultural Heritage (HUMN 220)	3
	<b>14</b>

Organic Chemistry II and Lab	4
Physiology	4
Religious Studies core elective	3
Cultural Heritage (HUMN 230)	3
Literature core elective	3
	<b>17</b>

### SENIOR

Science elective 300-Level	3
Anatomy	4
Fine Art/Music core elective	3
General elective	3
Philosophy core elective	3
	<b>16</b>

Science elective 300-Level	3
Science electives	9
Economics/Business core elective	3
Great Ideas in Medicine	1
	<b>16</b>

# The Health Science 4+1 Program with the Master of Science in Clinical Exercise Physiology

The 4+1 Program allows you to earn a Bachelor of Science degree with a major in Health Science in four years and a Master of Science degree in Clinical Exercise Physiology in just one additional year of graduate work. This is possible because, in the Health Science 4+1 Program, you take graduate level courses as part of the Health Science major. In your first four years, you will take a variety of interesting courses such as physiology, human anatomy, biochemistry and nutrition within the framework of a strong liberal arts curriculum. You will also benefit from 100 contact hours of practical experience in the clinical or fitness workplace.

## What to look forward to in earning your Master of Science in Clinical Exercise Physiology

In your graduate year, you will complete the requirements for the Master of Science in Clinical Exercise Physiology. The required graduate courses can be found on the bottom of the next page.

*Admission to the graduate program in Clinical Exercise Physiology is not automatic. The undergraduate student must meet the requirements for graduate school which include a 3.2/4.0 grade point average.*

*Successful completion of the Master of Science in Clinical Exercise Physiology is awarded after passing an academic/competency skill exam offered as a part of Lab IV. Students are encouraged to sit for the American College of Sports Medicine (ACSM) certification exam after completion of the program. As an ACSM endorsed program, graduates receive a discount on the exercise specialist exam. Recommended course sequence can be modified to the special needs of a student completing prerequisite classes in the first year.*

# Recommended Program

## Bachelor of Science in Health Science

### 4+1 Master of Science in Clinical Exercise Physiology

#### FRESHMAN

Writing Colloquium	3
Trigonometry	3
General Chemistry I and Lab	4
Social Science core elective	3
Philosophy core elective (Ethics)	3
	<b>16</b>

Research Writing	3
General Chemistry II and Lab	4
Principles of Biology and Lab	4
Social Science core elective	3
	<b>14</b>

#### JUNIOR

General Nutrition	3
Human Anatomy	4
General elective	3
Principles of Biochemistry	3
Cultural Heritage (HUMN 240)	3
	<b>16</b>

Exercise Physiology	3
Social Science core elective	3
Biomechanics	3
Cultural Heritage (HUMN 250)	3
General elective	3
	<b>15</b>

#### Master of Science in Clinical Exercise Physiology

##### Summer

Behavior Modification and Preventative Complementary Health (EXPH 681)	3
Exercise Physiology Lab III–Graded Exercise Testing (EXPH 623)	2
Laboratory Ethics/Laboratory Procedures (EXPH 685)	2
	<b>7</b>

##### Fall

Advanced Exercise Physiology (EXPH 662)	3
Exercise Pharmacology (EXPH 663)	3
Internship (EXPH 690)	2
	<b>8</b>

#### SOPHOMORE

Speech Communication	3
Biostatistics	3
Physics I and Lab	4
Organic Chemistry I and Lab	4
Cultural Heritage (HUMN 220)	3
	<b>17</b>

Human Physiology	4
Physics II and Lab	4
Organic Chemistry II and Lab	4
Cultural Heritage (HUMN 230)	3
	<b>15</b>

#### SENIOR

Applied Fitness Lab	1
Current Topics in Exercise Physiology	2
Adv. CV/Resp Physiology	3
Fine Art/Music core elective	3
Literature core elective	3
General elective	3
	<b>15</b>

EKG Lab	1
Exercise Biochemistry and Metabolism	3
Cardiopulmonary Pathophysiology	3
Internship	2
Religious Studies core elective	3
	<b>12</b>

##### Spring

Special Populations (EXPH 664)	3
Applied Nutritional Physiology (EXPH 642)	3
Internship (EXPH 690)	2
	<b>8</b>

##### Summer

Program Development and Administration (EXPH 684)	3
Exercise Physiology Lab IV–Comprehensive Exam (EXPH 624)	1
	<b>4</b>