

Health Sciences Major

The Health Sciences Discipline

The health sciences major is designed to prepare students with the knowledge, skills, and abilities necessary to successfully pursue graduate and professional studies in a variety of health related fields. Students choose a concentration based on the field of interest. Montreat offers concentrations for students seeking a program in pre-medical, pre-dental, pre-pharmacy, pre-physical therapy, pre-optometry, pre-veterinary, pre-chiropractic, and pre-physician assistant. The health science major includes the core science coursework in biology, chemistry, and physics. Then each concentration has additional coursework tailored to the admissions requirements commonly found for programs in the health science field of the student's choosing, as well as internships to provide the student with exposure to health care professionals.

Why Study Health Sciences at Montreat College?

The health sciences major combines the core parts of Montreat College's mission to educate students through intellectual inquiry, spiritual formation, and preparation for calling and career. The intellectual challenges of the natural sciences, the application of health sciences to serve God through serving others, and the preparation for a health profession are all wrapped up within this major. Montreat College's liberal arts core develops the student's communication and critical thinking skills, and seeks to build a broader view of the world that will enhance the ability of the health care provider to connect with their patients.

After Graduation

After graduation, students may seek admission to programs that lead to degrees for licensure in the health professions. This includes medical school to earn the M.D. or D.O. degree, dental school to earn a D.D.S. or D.M.D., physical therapy school for a D.P.T., pharmacy school for a Pharm. D., veterinary school to earn a D.V.M., physician assistant master's program, or chiropractic school for a D.C.

Requirements of a Major in Health Sciences

- Degree Component
- Completion of the General Education Core (50-56 credits)
 - BL 103-104 are required for the Gen-Ed science
 - MT 121 or higher is required for the Gen-Ed math
- Completion of the General Education Competencies
- Completion of the Health Sciences Major Core (32.5 credits)
- Completion of a Health Sciences Major Concentration (26-34 credits)
- Completion of required electives to bring total up to 120 credits (4.5-13 credits)
- Completion of 27 credits at the 300-level or above
- Completion of the Major Field Test

Completion of 120 credit hours with a minimum GPA of 2.0 (two terms and 32 credit hours must be completed at Montreat College)

Health Sciences Major Core (32.5credits)

- BL 103 Advanced Survey of Biological Principles I (4)
- BL 104 Advanced Survey of Biological Principles II (4)
- BL 206 Human Anatomy and Physiology I (4)
- BL 207 Human Anatomy and Physiology II (4)
- BL 220 Medical Terminology (1)
- BL 230 Sophomore Science Seminar (.5)
- BL 301 Biometrics (3)
- BL 340 Research Methods (3)
- BL 440 Internship (3)
- BL 445 Senior Science Seminar (1)
- CH 101 General Chemistry I (4)
- CH 102 General Chemistry II (4)
- IS 310 Pre-Internship (1)
- PC 131 College Physics I (4)

Choose from eight Health Sciences Concentrations:

- Pre-Chiropractic (26 credits)
- Pre-Dental (27 credits)
- Pre-Medical (34 credits)
- Pre-Optometry (26 credits)
- Pre-Pharmacy (27 credits)
- Pre-Physical Therapy (26 credits)
- Pre-Physician Assistant (27 credits)
- Pre-Veterinary (31 credits)

Pre-Chiropractic Concentration (26 credits)

Pre-Chiropractic Concentration Courses

- CH 220 Organic Chemistry I (4)
- PC 132 College Physics II (4)
- EX 310 Physiology of Exercise (3)
- EX 320 Exercise Testing and Measurement (3)
- EX 330 Kinesiology and Biomechanics (3)
- EX 340 Exercise Prescription (3)

Choose 5 additional credits from the following:

- BL 315 Cell Biology (4)
- BL 410 Genetics (4)
- BL 420 Biochemistry (3)
- BL 420L Biochemistry Lab (1)
- EX 350 Prevention and Treatment of Athletic Injuries (3)
- EX 450 Rehabilitation and Modalities in Sports Medicine (3)

Pre-Dental Concentration (27 credits)

Pre-Dental Concentration Courses

BL 315	Cell Biology (4)
BL 405	Microbiology (4)
BL 420	Biochemistry (3)
CH 220	Organic Chemistry I (4)
CH 221	Organic Chemistry II (4)
MT 191*	Applied Calculus I (4)
PC 132	College Physics II (4)

*Course double-counts for the Gen-Ed requirement

Pre-Medical Concentration (34 credits)

Pre-Medical Concentration Courses

BL 315	Cell Biology (4)
BL 405	Microbiology (4)
BL 410	Genetics (4)
BL 420	Biochemistry (3)
CH 220	Organic Chemistry I (4)
CH 221	Organic Chemistry II (4)
MT 191*	Applied Calculus I (4)
PC 132	College Physics II (4)
PY 202*	General Psychology (3) OR PY 201 Psych. Applied to Modern Life

*Course double-counts for the Gen-Ed requirement

Pre-Optometry Concentration (26 credits)

Pre-Optometry Concentration Courses

BL 405	Microbiology (4)
BL 420	Biochemistry (3)
CH 220	Organic Chemistry I (4)
MT 191*	Applied Calculus I (4)
PC 132	College Physics II (4)
PY 202*	General Psychology (3) OR PY 201 Psych. Applied to Modern Life

*Course double-counts for the Gen-Ed requirement

Choose **4** additional credits from the following:

BL 315	Cell Biology (4)
BL 410	Genetics (4)
BL 420L	Biochemistry Lab (1)
EX 310	Physiology of Exercise (3)
EX 320	Exercise Testing and Measurement (3)
EX 330	Kinesiology and Biomechanics (3)

- EX 340 Exercise Prescription (3)
- EX 350 Prevention and Treatment of Athletic Injuries (3)
- EX 450 Rehabilitation and Modalities in Sports Medicine (3)

Pre-Pharmacy Concentration (27 credits)

Pre-Pharmacy Concentration Courses

- BL 315 Cell Biology (4)
- BL 405 Microbiology (4)
- BL 420 Biochemistry (3)
- CH 220 Organic Chemistry I (4)
- CH 221 Organic Chemistry II (4)
- MT 191* Applied Calculus I (4)

*Course double-counts for the Gen-Ed requirement

Choose 4 additional credits from the following:

- BL 410 Genetics (4)
- BL 420L Biochemistry Lab (1)
- EX 310 Physiology of Exercise (3)
- EX 320 Exercise Testing and Measurement (3)
- EX 330 Kinesiology and Biomechanics (3)
- EX 340 Exercise Prescription (3)
- EX 350 Prevention and Treatment of Athletic Injuries (3)
- EX 450 Rehabilitation and Modalities in Sports Medicine (3)

Pre-Physical Therapy Concentration (26 credits)

Pre-Physical Therapy Concentration Courses

- PC 132 College Physics II (4)
- PY 202* General Psychology (3) **OR**
PY 201 Psych. Applied to Modern Life (3)
- EX 310 Physiology of Exercise (3)
- EX 320 Exercise Testing and Measurement (3)
- EX 330 Kinesiology and Biomechanics (3)
- EX 340 Exercise Prescription (3)
- EX 350 Prevention and Treatment of Athletic Injuries (3)
- EX 450 Rehabilitation and Modalities in Sports Medicine (3)

*Course double-counts for the Gen-Ed requirement

Pre-Physician Assistant Concentration (27 credits)

Pre-Physician Assistant Concentration Courses

- BL 315 Cell Biology (4)
- BL 405 Microbiology (4)
- MT 191* Applied Calculus I (4)

*Course double-counts for the Gen-Ed requirement

Choose **15** additional credits from the following:

BL 410	Genetics (4)
BL 420	Biochemistry (3)
BL 420L	Biochemistry Lab (1)
EX 310	Physiology of Exercise (3)
EX 320	Exercise Testing and Measurement (3)
EX 330	Kinesiology and Biomechanics (3)
EX 340	Exercise Prescription (3)
EX 350	Prevention and Treatment of Athletic Injuries (3)
EX 450	Rehabilitation and Modalities in Sports Medicine (3)
PC 132	College Physics II (4)

Pre-Veterinary Concentration (31 credits)

Pre-Veterinary Concentration Courses

BL 205	Animal Diversity and Ecology (4)
BL 315	Cell Biology (4)
BL 410	Genetics (4)
BL 405	Microbiology (4)
BL 420	Biochemistry (3)
CH 220	Organic Chemistry I (4)
CH 221	Organic Chemistry II (4)
MT 191*	Applied Calculus I (4)

*Course double-counts for the Gen-Ed requirement

Four Year Plan: Bachelor of Science in Health Sciences			
Concentrations in Pre-Chiropractic, Pre-Dental, Pre-Medical, Pre-Optometry, Pre-Pharmacy, Pre-Physical Therapy, Pre-Physician Assistant, Pre-Veterinary			
Freshman Year			
Fall Semester		Spring Semester	
IS 102 Foundations of Faith and Learning	2	MT 121 College Algebra or higher	3
BB 101 Survey of Old Testament	3	BB 102 Survey of New Testament	3
EN 101 English Composition	3	EN 102 English Composition II	3
CH 101 General Chemistry I	4	CH 102 General Chemistry II	4
BL 103 Advanced Survey of Biological Prin. I	4	BL 104 Advanced Survey of Biological Prin. II	4
	16		17
Sophomore Year			
Fall Semester		Spring Semester	
HS 101 History of World Civilization I	3	HS 102 History of World Civilization II	3
BL 220 Medical Terminology	1	Gen-Ed Oral Competency	3
BL 206 Human Anatomy and Physiology I	4	BL 207 Human Anatomy and Physiology II	4
CS 102 Computer Applications and Concepts	3	Gen-Ed Literature	3
ES 230 Sophomore Science Seminar	.5	Physical Education Course	1
Gen-Ed Social Science	3		
	13.5		14
Junior Year			
Fall Semester		Spring Semester	
Gen-Ed Humanities	3	BL 301 Biometrics	3
Health Science Concentration Course/ Elective	3	Health Science Concentration Course/ Elective	4
Health Science Concentration Course/ Elective	4	Health Science Concentration Course/ Elective	4
Health Science Concentration Course/ Elective	4	IS 310 Pre-Internship	1
		Gen-Ed Humanities	3
	14		15
Junior Summer			
BL 440 Internship			3
Senior Year			
Fall Semester		Spring Semester	
BL 340 Research Methods	3	IS 461 Seminar on Faith and Life	2
Health Science Concentration Course/ Elective	3	Health Science Concentration Course/ Elective	4
Health Science Concentration Course/ Elective	3	BL 445 Senior Seminar	1
PC 131 College Physics I (offered every other year)	4	Health Science Concentration Course/ Elective	3
Physical Education Course	1	Gen-Ed Humanities	3
	14		13
<i>Completion of 27 credits at the 300-level or above.</i>			
<i>Completion of the Major Field Test by the end of the Senior Year.</i>			
Total hours required for degree:			120.5