

# Biomedical Science

## Bachelor of Science with a Major in Biomedical Science

<b>General Education</b>		<b>30</b>
Biomedical Science majors are required to take the following specific courses which may also be used to help satisfy General Education requirements. Some courses in the Required Core also contribute to General Education requirements.		
COMM 110	Fundamentals of Public Speaking	
ENGL 110	College Composition I	
ENGL 120	College Composition II	
<b>Required Core Courses</b>		<b>60</b>
BIOL 150	General Biology I	4
BIOL 151	General Biology II	4
BIOL 220	Anatomy and Physiology I	4
BIOL 221	Anatomy and Physiology II	4
CHEM 121	General Chemistry I	5
CHEM 122	General Chemistry II	5
CHEM 341	Organic Chemistry I	5
or CHEM 240	Fundamentals of Organic Chemistry	
CHEM 481	Biochemistry I	3
or CHEM 381	Fundamentals of Biochemistry	
HMS 100	Introduction to Healthcare Professions	2
KIN 431	Kinesiology	3
PHYS 211	College Physics I	4
PHYS 212	College Physics II	4
PSY 111	Introduction to Psychology	3
PSY 241	Introduction to Statistics	4
or BIOL 240	Biometry	
or DATA 211	Applied Statistics and Data Visualization	
or MATH 210	Elementary Statistics	
SCI 240	Research Methods	2
SCI 494	Directed Research in Science	1-6
SOC 110	Introduction to Sociology	3
<b>Primary Healthcare Track (pre-medicine, pre-dental, pre-pharmacy, pre-vet, pre-optometry) - 124 credits total</b>		<b>47</b>
ATR 207	Prevention and Care of Injuries	2
ATR 270	Upper/Low Extremity Evaluation	3
BIOL 215	Genetics	4
CHEM 342	Organic Chemistry II (Must take Chem 341 in the core)	5
CHEM 482	Biochemistry II (Must take Chem 481 in the core)	3
ESR 307	Head, Neck, and Spine Evaluation	3
KIN 334	Nutrition for Physical Performance	2
MATH 165	Calculus I	4
MHA 349	Psychopharmacology	3
PSY 261	Psychology of Adjustment	3
or PSY 270	Psychological Disorders and Treatments	
SCI 300	AI in Healthcare	3
SCI 480	Seminar	2
SOC 201	Social Problems	3
or SOC 279	Aging and Life Course	
Select 8 credits from the following Biology courses		8
BIOL 302	General Microbiology	
BIOL 346	Developmental Biology	

BIOL 465	Immunology	
BIOL 470	Histology	
BIOL 480	Molecular Biology	
BIOL 482	Neurobiology	
or PSY 465	Introduction to Behavioral Neuroscience	
<b>Allied Healthcare Track (pre-chiropractic, pre-OT, pre-PT) - 121 credits total</b>		<b>44</b>
ATR 207	Prevention and Care of Injuries	2
BIOL 202	Introductory Microbiology	4
ESR 303	Therapeutic Exercise I	3
ESR 304	Therapeutic Exercise II	3
ESR 305	Therapeutic Exercise III	3
ESR 308	Biomechanics	2
ESR 414	Pathomechanics	2
KIN 433	Physiology of Exercise	3
MATH 103	College Algebra	4
PSY 250	Developmental Psychology	3
PSY 261	Psychology of Adjustment	3
PSY 270	Psychological Disorders and Treatments	3
PSY 460	Sensation and Perception	3
PSY 465	Introduction to Behavioral Neuroscience	3
SOC 201	Social Problems	3
or SOC 279	Aging and Life Course	
<b>Research Professional Track - 121 credits total</b>		<b>44</b>
BIOL 215	Genetics	4
BIOL 302	General Microbiology	4
BIOL 480	Molecular Biology	4
BIOL 482	Neurobiology	4
or PSY 465	Introduction to Behavioral Neuroscience	
CHEM 342	Organic Chemistry II	5
CHEM 480L	Biochemistry Laboratory	2
MATH 165	Calculus I	4
SCI 300	AI in Healthcare	3
SCI 480	Seminar	2
Electives in BIOL or CHEM; must be 200+; recommended courses are below		12
SCI 95	Interconnecting Perspectives in Science	0,
BIOL 250	Cellular Biology	4
BIOL 346	Developmental Biology	4
BIOL 402	Bioinformatics	4
BIOL 445	Cancer Biology	3
BIOL 465	Immunology	4
BIOL 470	Histology	4
CHEM 330	Quantitative Analysis	4
CHEM 360	Principles of Physical Chemistry	4
CHEM 430	Instrumental Analysis	5
CHEM 442	Medicinal Chemistry	3
CHEM 461	Physical Chemistry I	4
CHEM 462	Physical Chemistry II	4
CHEM 482	Biochemistry II	3