

Biomedical Sciences Pre-Professional Option, B.S.

Course	Title	Semester Credit Hours
Freshman Year		
Semester 1		
BIOL 1306 & BIOL 1106	General Biology I and General Biology Laboratory I	4
CHEM 1311 & CHEM 1111	Gen Inorganic Chemistry I and Gen Inorganic Chem Lab I	4
ENGL 1301	Rhetoric and Composition	3
MATH 2413	Calculus I	4
UNIV 1201	Learning in Global Context	2
Semester Credit Hours		17
Semester 2		
BIOL 1307 & BIOL 1107	General Biology II and General Biology Laboratory II	4
CHEM 1312 & CHEM 1112	Gen Inorganic Chemistry II and Gen Inorganic Chem Lab II	4
ENGL 1302	Rhetoric and Composition	3
Creative arts		3
Semester Credit Hours		14
Sophomore Year		
Semester 1		
BIOL 2421	Elementary Microbiology	4
HIST 1301	American History to 1877	3
PHYS 1301 & PHYS 1101	College Physics I and Coll Physics I Laboratory	4
POLS 2301	Government and Politics of US	3
Communications		3
Semester Credit Hours		17
Semester 2		
HIST 1302	American History since 1877	3
PHYS 1302 & PHYS 1102	College Physics II and College Physics II Lab	4
POLS 2302	Government and Politics of TX	3
Lang/Phil/Culture		3
Social/Behavioral		3
Semester Credit Hours		16
Junior Year		
Semester 1		
BIOL 3402	Genetics	4
BIOL 3408	Animal Physiology	4
CHEM 3323 & CHEM 3123	Organic Chemistry I and Organic Chemistry Lab I	4
Elective		4
Semester Credit Hours		16
Semester 2		
BIOL 4401	Molecular Biology	4
CHEM 3325 & CHEM 3125	Organic Chemistry II and Organic Chemistry Lab II	4
STAT 4301	Biostatistics	3

Elective		4
Semester Credit Hours		15
Senior Year		
Semester 1		
BIOL 4426	Cellular Physiology	4
BIOL 4102	Seminar WI	1
BIOL, adv. (p.)		3
Electives, adv.		4
Semester Credit Hours		12
Semester 2		
BIOL 4335	Molecular Genetics	3
BIOL, adv. (p.)		3
Electives, adv.		4
Elective		3
Semester Credit Hours		13
Total Credit Hours Required:		120

Students pursuing the pre-professional option may choose from approved minor electives in any suitable field.

Students pursuing the pre-professional option (medicine, veterinary medicine, dentistry, pharmacy, physician's assistant, optometry, physical therapy and occupational therapy) may choose from any of the approved biology electives that are biomedically relevant courses, below:

Approved Biomedical Sciences Electives

Code	Title	Semester Credit Hours
BIOL 2401	Human Anatomy and Physiol	4
BIOL 2402	Human Anat and Physiology II	4
BIOL 3301	Evolutionary Theory	3
BIOL 3407	Ecology	4
BIOL 4304	Research Projects in Biol	1-3
BIOL 4332	Pathophysiology	3
BIOL 4334	Molecular Neurobiology	3
BIOL 4355	Topics in Biology (Approved topics are: Cancer Biology, Epigenetics, Immunology, Genetics of Human Disease, Systems Neurobiology, Ecology and Human Disease, or Understanding Human Physiology)	3
BIOL 4406	Bacteriology	4
BIOL 4408	Immunology	4
BIOL 4410	Topics in Biology (Special Topics: Ecology of Human Disease, Functional Neuroanatomy or Human Ecology and Health)	4
BIOL 4433	Histology	4
BIOL 4434	Biology of Forensic Science I	4
BIOL 4435	Biology of Forensic Science II	4
Total Semester Credit Hours		49-51

Organismal biology classes including BIOL 3375 , BIOL 3401 , BIOL 3403 Plant Taxonomy, BIOL 3405 , BIOL 3409 , BIOL 4413 , BIOL 4425 Ornithology, BIOL 4427 Herpetology, BIOL 4429 Mammalogy, BIOL 4431 Ichthyology, BIOL 4355 Topics in Biology: Tropical Ecology, Tropical Bid. Field Tech., BIOL 4410 Topics in Biology: Marine Ecology, Marine Biology are not suitable courses for biomedical electives. New courses will be reviewed and approved by the departmental Biomedical Curriculum Committee.