

2008-2009 Bulletin

SUGGESTED DEGREE MAP - BIOMEDICAL SCIENCES MAJOR – PRE-MEDICINE STUDENTS

Degree: BS Plan A or Plan B, Major: Biomedical Sciences

Minor: Optional for Plan A, Required for Plan B (Any University Approved*)

Course	Cr. Hrs.	Grade	Course	Cr. Hrs.	Grade
FRESHMAN YEAR					
Semester: <u>Fall</u> Total Credit Hours: <u>15</u>			Semester: <u>Spring</u> Total Credit Hours: <u>16</u>		
UP (BIO 110) IIA	4		BIO 208	3	
UP (CHM 131) IIB	4		CHM 132	4	
MTH 130	4		UP	3	
Competency	3		Elective	3	
			Competency	3	
SOPHOMORE YEAR					
Semester: <u>Fall</u> Total Credit Hours: <u>18</u>			Semester: <u>Spring</u> Total Credit Hours: <u>16</u>		
BIO 218	3		BIO 324	3	
CHM 345	3		BIO Elective	3	
Degree Requirement	3		CHM 346	2	
UP (PSY 100)	3		CHM 349	2	
UP	3		UP	3	
UP	3		Degree requirement	3	
JUNIOR YEAR					
Semester: <u>Fall</u> Total Credit Hours: <u>18</u>			Semester: <u>Spring</u> Total Credit Hours: <u>16</u>		
BIO 392	4		BIO 326	4	
BIO 500	3		PHY 131 & 171 or PHY 146 & 176	5	
PHY 130 & 170 or PHY 145 & 175	5		CHM 211	4	
UP	3		Degree requirement	3	
UP	3				
SENIOR YEAR					
Semester: <u>Fall</u> Total Credit Hours: <u>16-18</u>			Semester: <u>Spring</u> Total Credit Hours: <u>13-15</u>		
BIO Elective (see below)	3-4		BIO Elective (see below)	3	
BIO Elective (see below)	3-4		BIO Capstone Experiences (see below)	1-3	
CHM 425	3		Degree Requirement	3	
Degree Requirement	3		Degree Requirement	3	
Degree Requirement	3		Degree Requirement	3	
BIO Capstone Experiences (see below)	1				

124 hours minimum required for graduation (24 hour unrelated minor could require 126 hours for graduation).

40 hours of courses at the 300 level or above required.

Graduating in 4 years requires that students average around 32 credit hours per year. Some of these credits may be taken as

summer courses. However, dental schools prefer that students demonstrate an ability to succeed with a load of 15 – 18 credit hours of coursework per semester, which doesn't leave many credits for the summer.

*This map outlines the coursework that a Plan B biomedical sciences pre-medical student may undertake if choosing a minor in chemistry. If the student chooses to forego the chemistry minor for another, the student could replace CHM 211 with a course toward another minor (and would likely need to take additional courses toward that minor). If a minor other than CHM is chosen, CHM 211 and CHM 523 may be replaced with coursework toward the minor. Note that additional coursework toward the alternative minor will be needed to fulfill the requirements of the alternate minor (total of at least 24 credit hours).

Other Notes

- 1) Of the coursework listed as "BIO Elective", at least 3 hours must be selected from the Integrative Course List in consultation with an advisor:
 - a. BIO 501 – Evolution – 3 credits
 - b. BIO 524 – Molecular Biology – 4 credits
 - c. BIO 544 – Developmental Biology – 4 credits
 - d. BIO 545 – Molecular Genetics – 4 credits
 - e. BIO 580 – Medical Microbiology – 4 credits
 - f. BIO 591 – Neurophysiology – 3 credits
- 2) The remainder of electives may be selected from the Medical and Specialty Courses in consultation with an advisor:
 - a. BIO 320 – Biology of Bacteria – 3 credits
 - b. BIO 325 – Biotechnology – 3 credits
 - c. BIO 337 – Comparative Vertebrate Anatomy – 4 credits
 - d. BIO 534 – Endocrinology – 3 credits
 - e. BIO 536 – Histology – 3 credits
 - f. BIO 537 – Immunology – 4 credits
 - g. BIO 577 – Hematology and Immunohematology – 3 credits
 - h. BIO 590 – Cardiovascular Physiology – 3 credits
 - i. HSC 214 – Human Anatomy – 4 credits
 - j. HSC 411 – Pathophysiology – 3 credits

Note: You may not take both BIO 337 and HSC 214.
- 3) At least two credits must be selected from one of the following capstone experiences:
 - a. BIO 403 – Undergraduate Research
 - b. BIO 490 – Biomedical Sciences Capstone Seminar
 - c. BIO 495 – Undergraduate Internship in Biology