

2008-2009 Bulletin - Suggested BIOMEDICAL SCIENCES MAJOR Degree Map - PRE-PHYSICAL THERAPY or PRE-PHYSICIAN'S ASSISTANT

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

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

Course	Cr. Hrs.	Grade		Course	Cr. Hrs.	Grade
<b>FRESHMAN YEAR</b>						
Semester: <u>Fall</u> Total Credit Hours: <u>14</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	
UP (MTH 106 or higher)	3			UP	3	
Competency	3			UP (PSY 100)	3	
				Competency	3	
<b>SOPHOMORE YEAR</b>						
Semester: <u>Fall</u> Total Credit Hours: <u>15</u>				Semester: <u>Spring</u> Total Credit Hours: <u>16</u>		
BIO 218	3			BIO 326	4	
CHM 345	3			CHM 346	3	
UP (PSY 220)	3			CHM 349	2	
UP	3			HSC 214	4	
				ENG 201	3	
<b>JUNIOR YEAR</b>						
Semester: <u>Fall</u> Total Credit Hours: <u>15</u>				Semester: <u>Spring</u> Total Credit Hours: <u>17</u>		
BIO 324	3			BIO 392	3	
CHM 425	3			BIO 500**	3	
PHY 130/170	5			PHY 131/171	5	
Degree Requirement	3			UP	3	
BIO Capstone Experience (see below)	1					
<b>SENIOR YEAR</b>						
Semester: <u>Fall</u> Total Credit Hours: <u>15-17</u>				Semester: <u>Spring</u> Total Credit Hours: <u>13-14</u>		
BIO Elective	3-4			BIO Elective	3-4	
BIO Elective	3-4			HSC 411 (Biomed elective)	3	
Degree Requirement	3			BIO Capstone Experience (see below)	1	
Degree Requirement	3			Degree Requirement	3	
Degree Requirement	3			Degree Requirement	3	
				UP	3	

124 hours minimum required for graduation. 40 hours of courses at the 300 level or above required.

Students may choose to take classes during the summer as well.

BIO electives should be taken in consultation with an advisor.

\*This map outlines the coursework that a Plan A or B Biomedical Sciences 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 the student chose the Plan A option, CHM 211 could be replaced with whatever degree requirements the student needed to fill.

\*\*If STA 382 is taken instead of BIO 500, three additional BIO credits are required.

\*\*\* Comparative Anatomy (BIO 337) can be taken instead of HSC 214, but should be taken during the Jr. or Sr. year.

#### 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