

**SUGGESTED DEGREE MAP - BIOMEDICAL SCIENCES MAJOR – PRE-DENTAL 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
<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	3		UP	3	
Competency	3		UP	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>15</u>		
BIO 218	3		BIO 326	4	
CHM 345	3		CHM 346	3	
Degree Requirement	3		CHM 349	2	
UP	3		UP	3	
UP	3		ENG 201	3	
<b>JUNIOR YEAR</b>					
Semester: <u>Fall</u> Total Credit Hours: <u>18</u>			Semester: <u>Spring</u> Total Credit Hours: <u>16</u>		
BIO 324	3		BIO 500	3	
BIO 392	4		BIO Elective (see below)	4	
PHY 130 & 170	5		PHY 131 & 171	5	
UP	3		CHM 211	4	
UP	3				
<b>SENIOR YEAR</b>					
Semester: <u>Fall</u> Total Credit Hours: <u>17</u>			Semester: <u>Spring</u> Total Credit Hours: <u>16-18</u>		
BIO Elective (see below)	4		BIO Elective (see below)	3	
BIO Elective (see below)	3		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		Degree requirement	3	

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-dental 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 524 – Molecular Biology – 4 credits
  - b. BIO 544 – Developmental Biology – 4 credits
  - c. BIO 545 – Molecular Genetics – 4 credits
  - d. BIO 580 – Medical Microbiology – 4 credits
  - e. 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
- 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