

## Bachelor of Science in Biology - Science Education Concentration (BIC)

*A Suggested Sequence of Required Courses (2017-2018 Catalog)*

F r e s h m a n Y e a r			
Fall		Spring	
_____ 0 Chapel (CHA 1088)		_____ 0 Chapel (CHA 1088)	
_____ 2 BIC 1212 Examined Life I		_____ 3 BIC 1324 World Cultures II	
_____ 3 BIC 1314 World Cultures I		_____ 3 BIC 1323 Rhetoric II	
_____ 4 BIC 1413 Rhetoric I		_____ 4 CHE 1301/1101 Chemistry I	
_____ 3-4 MTH 1320 (if needed) or GEO 1406		_____ 3 MTH 1321 Calculus	
_____ 4 <b>BIO 1305/1105 or 1405</b> (see below - Pre-Biology)		_____ 4 <b>BIO 1306/1106 or 1406</b> (see below - Pre-Biology)	
<b>Total:</b> 38-39		<b>Total:</b> 17	
S u m m e r			
First		Second	
_____ 4 PHY 1408/1420 Physics I		_____ 4 PHY 1409/1430 Physics II	
<b>Total:</b> 4		<b>Total:</b> 4	
S o p h o m o r e Y e a r			
Fall		Spring	
_____ 3 BIC 2330 Social World I		_____ 3 BIC 2340 Social World II	
_____ 3 BIC 2334 World Cultures III		_____ 3 BIC 2344 World Cultures IV	
_____ 3-4 Foreign Language - 1401/1412 (see reverse)		_____ 3-4 Foreign Language - 1402/2310 (see reverse)	
_____ 3 STA 2381 or MTH 1322		_____ 3 <b>TED 2340 Teaching in Secondary Sch.</b>	
		_____ 1 <b>TED 1112 Instructional Tech Lab</b>	
_____ 4 CHE 1302/1102 Chemistry II		_____ 4 <b>BIO 2306/2106 Genetics</b>	
<b>Total:</b> 16-17		<b>Total:</b> 17-18	
S u m m e r			
First		Second	
_____ 3 CHE 3331 Organic Chemistry I		_____ 3 CHE 3332 Organic Chemistry II	
		_____ 2 CHE 3238 Organic Chemistry Lab	
<b>Total:</b> 3		<b>Total:</b> 5	
J u n i o r Y e a r			
Fall		Spring	
_____ 3 Foreign Language - 2310 (see reverse)		_____ 3 Foreign Language - 2320 (see reverse)	
_____ 1 Lifetime Fitness		_____ 3 BIC 3358 Biblical Heritage/Ethics	
_____ 4 <b>BIO Elective - Group 1</b> (see below)		_____ 1 Lifetime Fitness	
_____ 3 <b>TED 3340 Teaching Assoc. Sec. I</b>		_____ 4 <b>BIO Elective - Group 2</b> (see below)	
_____ 3 <b>TED 3387 Secondary Sci. Practicum</b>		_____ 3 <b>TED 3341 Teaching Assoc. Sec. II</b>	
<b>Total:</b> 14		<b>Total:</b> 17	
S u m m e r			
First		Second	
_____ 3		_____ 4 GEO 1408 or PHY 1455	
S e n i o r Y e a r			
Fall		Spring	
_____ 4 <b>BIO Elective - Group 3</b> (see below)		_____ 0 <b>BIO 4001 Exit examination</b>	
_____ 4 <b>BIO Elective</b> (see below)		_____ 3 <b>TED 4325 (Teaching Secondary Science)</b>	
_____ 3 <b>BIO 4333 Science Leadership</b> (alt fall)		_____ 6 <b>TED 4640 (Internship Sec Ed I)</b>	
_____ 4 GEO 1406 (sometimes not offered in fall)		_____ 6 <b>TED 4641 (Internship Sec Ed II)</b>	
<b>Total:</b> 15		<b>Total:</b> 15	

*All students must graduate with a minimum of 124 hours,  
36 of which must be at the 3000/4000 level.*

### Notes about major requirements:

- This program is designed for students interested in science education and certification to teach secondary science. This plan will require summer school in order to keep the class load reasonable.
- **Pre-Biology:** Students interested in biology as a major will choose the pre-biology designation upon enrollment at Baylor. To declare a major in Biology (BA or BS, all concentrations), a student must complete, with grades of a "C-" or better, either BIO 1305-1105 or 1405 and either BIO 1306-1106 or 1406 or their equivalents. Students may transfer credit for these courses (assuming grades of "C-" or better) as long as the courses were taken prior to initial matriculation at Baylor. Students may repeat each of these introductory courses only once if they fail to make a "C-" or better the first time they take the course. Students may only remain in the pre-biology designation until completion of 60 hours. A separate requirement is in place for students who wish to declare a prehealth care concentration (BA or BS plan) in Biology. In addition to the basic requirements above, these students must earn grades of B- or better in either BIO 1305 or 1405 and in either BIO 1306 or 1406 on their first attempt at the course. Students who have not met the admission requirement at 60 hours will not advance to the biology major and must change degree programs. Students who transfer credit to Baylor for BIO 1305-1105 or 1405 and BIO 1306-1106 or 1406 will be eligible to declare biology as a major upon initial enrollment at Baylor provided that minimum grade requirements are met as outlined above. Students who receive 5 on the AP examination (all concentrations) will be eligible to declare biology as a major upon enrollment at Baylor. Students may only remain in the Pre-Biology designation until completion of 90 hours. Students who have not met the admission requirement at 90 hours will not advance to the biology major and must change degree programs.
- **Secondary Education Science Minor requirements:** Students will declare the minor through the advising office of the School of Education (SOE). The SOE will advise for the courses in the minor. The CASA office will advise for the major in Biology. This minor will require the completion of 24 hours in teacher education courses. The minimum GPA required to remain in the minor are: 2.6 overall; 2.6 Biology; 2.6 Teacher Education. Other requirements for recommendation for certification include: acceptable scores on the Texas Examination of Educators Standards (TEXES) for both teaching area (science) and Pedagogy and Professional Responsibilities.
- Students will complete an internship during the spring of their senior year. Another option is to complete the internship during the fall of a 5th year if necessary.
- A grade of "C-" or better in 31 hours of biology courses used for the major **AND** in all courses required in non-Biology areas of
- BIO 1305-1105 and 1306-1106 are prerequisite to all "2000" and above level courses in biology. Non-biology majors may be admitted to upper-level courses without these prerequisites with consent of instructor and department chair.
- BIO 1401, 1402, 1403, 2401, and 2402 cannot be used to satisfy the minimum number of semester hours required for a major in biology.
- Group 1 - Field Courses: BIO 3303/3103, 3324/3124, 4405, 4406, 4414, 4418, 5522, 4427, 4428
- Group 2 - Morphology Courses : BIO 3324/3124, 3425, 3429, 4414, 4416, 4308/4108, 4426, 4431
- Group 3 - Physiology/Molecular Courses: BIO 3422, 4307/4107, 4417, 4306/4106, 4431
- BIO Electives: Choose 4 hours of electives. A maximum of 3 hours of Individual Topics may be used for elective credit. The Biology Department suggestions BIO 4365, 4366, or one 3V90.
- Check your degree audit often through Bearweb to ensure that you are making timely progress toward your degree.
- For more information, see the undergraduate catalog.