

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

A Suggested Sequence of Required Courses (2014-2015 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	BIO 1305/1105 or 1405 (see below - Pre-Biology)	_____ 4	BIO 1306/1106 or 1406 (see below - Pre-Biology)
Total:	37-38	Total:	17
S u m m e r			
First		Second	
_____ 4	PHY 1408/1420 Physics I	_____ 4	PHY 1409/1430 Physics II
Total:	4	Total:	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	TED 2340 Teaching in Secondary Sch.
_____ 4	CHE 1302/1102 Chemistry II	_____ 4	BIO 2306/2106 Genetics
Total:	16-17	Total:	16-17
S u m m e r			
First		Second	
_____ 3	CHE 3331 Organic Chemistry I	_____ 3	CHE 3332 Organic Chemistry II
Total:	3	_____ 2	CHE 3238 Organic Chemistry Lab
		Total:	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	BIO Elective - Group 1 (see below)	_____ 1	Lifetime Fitness
_____ 3	TED 3340 Teaching Assoc Sec. I	_____ 4	BIO Elective - Group 2 (see below)
_____ 3	TED 3387 Secondary Sci. Practicum	_____ 3	TED 3341 Teaching Assoc. Sec. II
Total:	14	_____ 3	TED 3388 Secondary Sci Practicum II
		Total:	17
S e n i o r Y e a r			
Fall		Spring	
_____ 4	BIO Elective - Group 3 (see below)	_____ 3	BIO 4333 Science Leadership
_____ 4	BIO Elective (see below)	_____ 4	BIO 4001 Exit examination
_____ 4	GEO 1408 or PHY 1455	_____ 3	TED 4325 (Teaching Secondary Science)
_____ 4	GEO 1406 (sometimes not offered in fall)	_____ 6	TED 4690 (Internship)
Total:	16	Total:	16

*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. 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, all with grades of "C" or better, on their record will be eligible to declare biology as a major upon initial enrollment at Baylor. Students who receive 5 on the AP examination will be eligible to declare biology as a major upon initial enrollment at Baylor even if they elect to take
- 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 hrs of BIO courses used for the major **AND** in all courses required in non-Biology areas of your audit.
- 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, 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.

Please see reverse side for important information on general requirements.

Bachelor of Science

Notes about General Requirements:

- Course selection is subject to availability within each semester.
- Please keep in mind that this is only a suggested sequence. Actual sequence will vary according to possible second major, minor, other program of study (including pre-health), and individual circumstances (ex., transfer credit, dual credit, and credit by exam).
- In order to complete your degree, you must fulfill all requirements in your major and general requirements for the Bachelor of Science.
- To complete a double major, you may not count any courses toward both majors.
- For more specific information on general requirements, see your undergraduate catalog.
- Check your degree audit often through Bearweb to ensure that you are making timely progress toward your degree.

Foreign Language:

- **Option A:** One modern language through 2320 level:
Arabic, Chinese, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, and Swahili
- **Option B:** One classical language through 2320 level or two classical through 1302 level:
Latin, Greek, Hebrew (If available, Akkadian, Aramaic, Syriac, and/or Ugaritic may be used)
*Chemistry majors must take a modern foreign language; German or Russian are strongly recommended.

Math & Science: You must complete a minimum of 34 hours of math and science courses. See the undergraduate catalog for a more detailed explanation or refer to your audit for specific science/math courses that may be required by your major.

Biology/Chemistry Prerequisite Policies

Biology- In order to register for BIO 1305 and 1306, students must have either a satisfactory math score on the ACT or SAT OR have completed MTH 1320 (Pre-Calculus) with a grade of B or better.

Chemistry- In order to register for CHE 1301, students must have either a satisfactory math score on the ACT or SAT or have a minimum grade of B in CHE 1300 AND a minimum grade of B in either MTH 1320 (Pre-Calculus) or MTH 1321 (Calculus)