

**Bachelor of Science in Biology: Option X: Computational Biology**  
2012-14 Catalog (Expires August 2020)

**University Core Curriculum**

**First-Year Signature Course:** UGS 302 or 303 \_\_\_\_

**English:** RHE 306 \_\_\_\_

**Humanities:** E 316K \_\_\_\_

**American & Texas Government:** 6 hrs from approved core list  
\_\_\_\_ + \_\_\_\_

**American History:** 6 hrs from approved core list  
\_\_\_\_ + \_\_\_\_

**Social and Behavioral Science:** 3 hrs from approved core list \_\_\_\_

**Mathematics:** 3 hrs from approved core list: \_\_\_\_ [M 408N or M 408C]

**Science and Technology Part I:** 6 hrs in a single subject from approved core list: \_\_\_\_ + \_\_\_\_ [CH 301 or 301H and 302 or 302H]

**Science and Technology Part II:** 3 hrs from a subject other than the one chosen for Part I from approved core list: \_\_\_\_ [BIO 311C]

**Visual & Performing Arts:** 3 hrs from approved core list \_\_\_\_

Note that no single course may be used to fulfill two core areas simultaneously. In most cases, students may satisfy both a *core requirement* and a *major requirement* with a single course. Plan II students may have additional options for some core requirements.

**Additional General Education Requirements**

**Two Writing Flags (must include a course that is not used to meet a core requirement and a course that is upper-division):** \_\_\_\_ + \_\_\_\_

**Writing Flag courses may satisfy other degree requirements.**

**Foreign Language, Option A, B, or C:** \_\_\_\_\_ + \_\_\_\_\_

A) Two semesters in a single language or attainment of second-semester proficiency in one language:

B) First semester-level proficiency in a foreign language and a three-hour course in the culture of the same language:

C) Two three-hour culture courses chosen from one foreign culture category from an approved list available in the CNS Dean's office and the college advising centers.

**Introductory Mathematics and Science, with Grades of C- or Better**

**Mathematics:** M 408N \_\_\_\_ + 408S \_\_\_\_ + 408M \_\_\_\_ OR M 408C \_\_\_\_ + 408D \_\_\_\_

**General Chemistry:** CH 301 or 301H \_\_\_\_ + 302 or 302H \_\_\_\_ + 204 \_\_\_\_

**Physics:** PHY 301 (or 317K, 303K) \_\_\_\_ + PHY 101L (or 117M, 103M) \_\_\_\_  
PHY 316 (or 317L, 303L) \_\_\_\_ + PHY 116L (or 117N, 103N) \_\_\_\_

**Introductory Biology:** BIO 311C \_\_\_\_ + 311D \_\_\_\_ + 325 \_\_\_\_ OR 315H \_\_\_\_ + 325H \_\_\_\_

**Computation, Statistics, and Additional Mathematics, with Grades of C- or Better**

**Linear Algebra, 3 hours:** SSC 329C, M 340L, or M 341: \_\_\_\_

**Probability and Statistics:** M 362K \_\_\_\_ + M 358K or M 378K or SSC 321 or SSC 325H or SSC 328M or BIO 328M: \_\_\_\_

**Computer Science:** CS 303E \_\_\_\_ + CS 313E or SSC 222 \_\_\_\_

**3 hours chosen from the following:** CS 323E, 323H, 324E, 237E, 329E, 337, 367; SSC 329D, 335, 374D, 374E; M 348, 372K, 376C: \_\_\_\_

**Biology Breadth Courses required for All BS Biology Options, with Grades of C- or Better**

**Cellular, Developmental, and Molecular Biology, 3 hours:** BIO 320, 326R, 344, or 349: \_\_\_\_

**Physiology and Neurobiology, 3 hours:** BIO 328, 361T, 365R, or 365S: \_\_\_\_

**Ecology and Evolution, 3 hours:** BIO 357, 359K, 370\*, or 373: \_\_\_\_

\* Asterisked courses are also on the option and/or concentration lists. Courses used for the biology breadth requirements may also count toward the laboratory requirements and the option or concentration requirements.

**Bachelor of Science in Biology: Option X: Computational Biology**  
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**Computational Biology Option with Grades of C- or Better**

**Computational biology:** BIO 321G \_\_\_\_ + 370 \_\_\_\_

**18 additional hours of upper-division Biology (may courses applied toward the Biology Breadth requirement):**

\_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_

**4 Laboratory Courses with Grades of C- or Better**

**BIO 321G:** \_\_\_\_

**2 Additional Upper-division Biology Laboratory courses:** \_\_\_\_ + \_\_\_\_

**1 Additional Biology Laboratory Course:** \_\_\_\_

Minimum of 24 upper-division hours in Biology, beyond BIO 325: \_\_\_\_

**Enough Additional Elective Hours to Reach a Total of 126 Hours including 36 Upper-division Hours**

\_\_\_\_

**Minimum Grade Point Average Requirements**

**2.0 grade point average in all mathematics and science courses required by degree \*:** \_\_\_\_

**2.0 grade point average in all courses taken at the University of Texas at Austin:** \_\_\_\_

\* Required mathematics and science courses may include: ACF, AST, BIO, CH, CS, EVS, GEO, HDF, HE, M, NEU, NSC, NTR, PHY, SSC, TXA, and UTS-Natural Sciences.

**Total Hours and Residency Requirements**

126 semester hours: \_\_\_\_

36 upper-division hours: \_\_\_\_

24 upper-division Biology hours beyond BIO 325 from approved lists: \_\_\_\_

60 hours in residence: \_\_\_\_

24 of the last 30 hours in residence: \_\_\_\_

21 upper-division Biology hours in residence: \_\_\_\_

No more than 16 hours of electives may be taken Pass/Fail. No more than 3 three-hour courses in Air Force Science, Military Science, and Naval Science may be counted toward the degree. The following courses will not count toward this degree: some Elements of Computing courses, KIN 119, or PED one-hour activity courses. Please check course descriptions of lower-division science courses not required for majors in the same field of study to see if they can or cannot count toward your degree.

Students may earn only one BA and one BS in Biology degree, though they may earn multiple majors. Students completing an additional degree must complete 24 hours in addition to those counted toward the bachelor's degree that requires the higher number of credit hours.