

Bachelor of Science in Biochemistry; Option I: Biochemistry

2012-2014 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 408C or M 408N]

Science and Technology Part I: 6 hrs in a single subject from approved core list: ____ + ____ [CH 301 or 301H + CH 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 specific 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 and approved list available in the CNS Dean's office and the college advising centers.

Mathematics and Physics with Grades of C- or Better

Entry-level Mathematics: M 408N ____ + 408S ____ + 408M ____ OR M 408C ____ + 408D ____

Mathematics or Computer Science: 3 upper-division hours ____

Physics, 8 hours: chosen from one of the following sequences (lecture and accompanying lab):

1) PHY 317K ____ + 117M ____ AND 317L ____ + 117N ____ OR

2) PHY 301 ____ + 101L ____ AND 316 ____ + 116L ____ OR

3) PHY 303K ____ + 103M ____ AND 303L ____ + 103N ____

Chemistry with Grades of C- or Better

Entry-level Chemistry: CH 301 or 301H ____ + 302 or 302H ____

Introductory Laboratory: CH 317 or 204 ____

Organic Chemistry (8 hours from ONE of the following sequences):

CH 328M ____ + 128K ____ + 328N ____ + 128L ____ OR CH 320M ____ + 320N ____ + 220C ____

Biochemistry: CH 339K ____ + 339L ____ + 369L ____ + 370 ____

Physical Chemistry: CH 353 or 353M ____

Analytical Chemistry: CH 455 ____

Bachelor of Science in Biochemistry; Option I: Biochemistry

2012-2014 Catalog (Expires August 2020)

Biology with Grades of C- or Better

BIO 311C _____ + 311D _____ + 325 _____ OR BIO 315H _____ + 325H _____

9 hours of Upper-division Biology, including:

3 hours from the approved Cellular and Developmental Biology List (List A): _____

3 hours from the approved Physiology list (List B): _____

3 additional hours from either List A or List B: _____

A. Cellular & Dev BIO

BIO 320 Cell BIO
 BIO 226L Gen Microbiology Laboratory
 BIO 326M Intro Medical Microbio & Immunology
 or 326R General Microbiology
 BIO 330 Animal Virology
 BIO 331L Lab Studies in Molecular BIO
 BIO 335 Intro to Biochemical Engineering

A. Cellular & Dev BIO (continued)

BIO 344 Molecular BIO
 BIO 346 Human BIO
 BIO 347 BIO & Genetics of Immune Disorders
 BIO 349 Developmental Biology
 BIO 360K Immunology
 BIO 361 Human Infectious Diseases
 BIO 365W Neurobiology of Addiction

B. Physiology

BIO 328 Intro Plant Physiology
 BIO 339 Metabolism & Biochem of Microorganisms
 BIO 345 Cell Physiology
 BIO 361T Comparative Animal Physiology
 BIO 365R Vertebrate Neurobiology
 or 371M Neuronal basis of Brain & Behavior
 BIO 365S Systems Physiology

Note: A course may not count toward both the Biology and the Chemistry requirements.

6 Additional Chemistry Hours, including 3 lab hours (marked with asterisk) with Grades of C- or Better

CH 431 Inorganic CH *	CH 364D Macromolecular Struc Det	CH 369K Techniques of Research *
CH 339J CH & Synthetic BIO	CH 364E Systems BIO	CH 369T Biotechnology Laboratory *
CH 341 Spec Topics in Lab CH *	CH 364F Astrobiology	CH 371K Sci Outreach in Elem Schools *
CH 354 Quantum CH & Spectroscopy	CH 365D Struc & Func of Proteins & Nucl Acids	CH 372C CH Peer Mentors in Rsch & Teaching *
CH 354L Physical CH II	CH 367C Materials CH	CH 375K or 475K Indiv Study in CH and Biochem
CH 354S Elements of Spectroscopy	CH 367L Macromolecular CH	CH 376K Advanced Analytical CH *
CH 364C Bioinformatics		

_____ + _____ * (lab)

No more than 3 hours each of CH 369K, 371K, and 372C may count toward this requirement. Three additional hours of CH 369K, 371K, and 372C may count as general elective hours toward the degree. Three hours of additional Biology from the Cellular and Developmental Biology list or the Physiology list may count toward the 6 hours of additional Chemistry. A course may not count toward both the Biology and the Chemistry requirements.

Enough Additional Elective Hours to Reach a Total of 127 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, NSC, NEU, NTR, PHY, SSC, TXA, and UTS-Natural Sciences.

Total Hours and Residency Requirements

127 semester hours: _____	36 upper-division hours _____
60 hours in residence: _____	24 of the last 30 hours in residence: _____
21 upper-division hours in residence (including 12 in chemistry): _____	No more than 16 hours of electives may be taken Pass/Fail.

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, M 301, 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 Biochemistry 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.

Chemistry/Biochemistry Undergraduate Advising Center: The Chemistry/Biochemistry Undergraduate Advising Office is located in Welch Hall (WEL) Room 2.216. For information call 471-3097. You can expect to receive the following assistance: information about degree requirements and academic policies and procedures; advice about course selection; assessment of your academic progress; and assistance with registration problems, when appropriate.