University Core Curriculum

First-Year Signature Course: UGS 302 or 303

English: RHE 306

American & Texas Government: 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.

Mathematics and Physics with Grades of C- or Better

Mathematics: M 408N + 408S + 408M OR M 408C + 408D

Statistics and Scientific Computation: SSC 321 + SSC 329C or M 340L or M 341

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

1) PHY 317K + 117M AND 317L + 117N
2) PHY 301 + 101L AND 316 + 116L
3) PHY 303K + 103M AND 303L + 103N

Chemistry with Grades of C- or Better

Chemistry: CH 301 or 301H + 302 or 302H + 317 or 204

Organic Chemistry: CH 328M + 128K

Biochemistry: CH 339K + 370

Computer Science Sequence with Grades of C- or Better

Complete one of the following sequences:

A. Computer Science: CS 303E
   9 additional hours chosen from CS 313E, 320N, 324E, 326E, 327E, and 329E: _____ + _____

B. Computer Science: CS 312
   9 additional hours chosen from CS 313K, 314, and an upper-division CS course: _____ + _____ + _____

Students seeking a more rigorous foundation in computer science are encouraged to choose sequence B.

Systems and Synthetic Biology with Grades of C- or Better

SSB 339J, Chemical and Synthetic Biology: _____
SSB 339Q, Systems Biology: Methods and Networks: _____
SSB 364C, Bioinformatics: _____

Degree requirements continued on page 2
### Bachelor of Science in Biochemistry; Option II: Systems and Synthetic Biology  
2012-2014 Catalog (Expires August 2020)

<table>
<thead>
<tr>
<th>Additional Biology and Chemistry with Grades of C- or Better</th>
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<tbody>
<tr>
<td>Biology: BIO 311C _____ + 311D _____ + 325 _____ OR BIO 315H _____ + 325H _____</td>
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6 additional hours of upper-division Biology from the approved list: _____ + _____

<table>
<thead>
<tr>
<th>Biology: BIO 320 Cell Bio</th>
<th>BIO 331L Lab Studies in Molecular BIO *</th>
<th>BIO 347 Biology &amp; Genetics of Immune Disorders</th>
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<tbody>
<tr>
<td>BIO 226L Gen Microbiology Laboratory *</td>
<td>BIO 337 Selected Topics in Biology</td>
<td>BIO 349 Developmental Biology</td>
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<tr>
<td>BIO 326R General Microbiology</td>
<td>BIO 344 Molecular Biology</td>
<td>BIO 360K Immunology *</td>
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<tr>
<td>BIO 330 Animal Virology</td>
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6 additional hours of upper-division Chemistry from the approved list: _____ + _____

<table>
<thead>
<tr>
<th>CH 128L Organic CH Laboratory *</th>
<th>CH 353 Physical CH I</th>
<th>CH 455 Fundamentals of Analytical CH *</th>
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<tbody>
<tr>
<td>CH 328N Organic CH II</td>
<td>or 353M Physical CH for Life Sciences</td>
<td>CH 369L Biochemistry Laboratory *</td>
</tr>
<tr>
<td>CH 341 Spec Topics in Lab CH *</td>
<td>CH 153K Physical CH Laboratory *</td>
<td>CH 369T Biotechnology Laboratory *</td>
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Of the 12 hours of upper-division Biology and Chemistry courses chosen to meet these requirements, at least 6 hours must be laboratory-based courses (marked with an asterisk): _____ + _____

6 Additional Hours of Independent Research with Grades of C- or Better

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<thead>
<tr>
<th>Biology: BIO 377 _____ + BIO 377 _____</th>
<th>OR</th>
<th>Chemistry: CH 369K _____ + CH 369K _____</th>
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</thead>
</table>

Note: 6 hours of an alternate independent research course may count by approval of the undergraduate adviser.

**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**

<table>
<thead>
<tr>
<th>127 semester hours: _____</th>
<th>60 hours in residence: _____</th>
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<tbody>
<tr>
<td>36 upper-division hours: _____</td>
<td>24 of the last 30 hours in residence: _____</td>
</tr>
<tr>
<td>21 upper-division hours in residence (including 12 in chemistry): _____</td>
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</tbody>
</table>

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. Advising is usually offered by appointment from 9:00am - 12noon and from 1:30pm - 4:30pm. 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.

**Student Responsibility:** While University faculty and staff members give students academic advice and assistance, each student is expected to take responsibility for his or her education and personal development. The student must know and abide by the academic and disciplinary policies given in the Undergraduate Catalog and in the General Information catalog, including rules governing quantity of work, the standard of work required to continue in the University, scholastic probation and dismissal, and enforced withdrawal. The student must also know and meet the requirements of his or her degree program, including the University’s basic education requirements, must enroll in courses appropriate to the program, must meet prerequisites and take courses in the proper sequence to ensure orderly and timely progress must seek advice about degree requirements and other University policies when necessary.