## Bachelor of Science in Physics

## Option VII: Biophysics

## 2014-16 Catalog (Expires August 2022)

| University Core Curriculum | Lacking |
| :---: | :---: |
| First-Year Signature Course: UGS 302 or 303 |  |
| English: RHE 306 |  |
| Humanities: One course chosen from E 316K (if taken prior to Fall 2014), 316L, 316M, 316N, 316P |  |
| 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: ___ + ___ [PHY 301 + 316] |  |
| Science and Technology Part II: 3 hrs from approved list in a subject other than the one chosen for Part I: |  |
| 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. |  |


| Additional General Education Requirements | Lacking |
| :--- | :--- | :--- |
| Two Writing Flags (must include a course that is not used to meet a core requirement and a course that is upper-division):________ |  |
| Quantitative Reasoning Flag Course: |  |
| Writing and Quantitative Reasoning 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 area. |  |
| C. Two three-hour culture courses chosen from one foreign culture area from an approved list available in the CNS Dean's office |  |
| and the college advising centers. |  |


| Mathematics and Introductory Science with grades of C- or better | Lacking |
| :---: | :---: |
| Calculus: M 408C __ + 408D__ OR M 408N __ + 408S __ + 408M __ |  |
| Physics: PHY 301__+101L__ + $316 \ldots+116 \mathrm{~L} \ldots+315 \ldots+115 \mathrm{~L}$ |  |
| Mathematics: M $427 \mathrm{~K} \ldots \ldots+427 \mathrm{~L}$ |  |
| 6 additional hours of upper-division mathematics: ___ + ___ (M 340L, 361, and 362K are recommended) |  |
| Chemistry: CH 301 or 301 H |  |
| Biology: BIO 311C __ + 311D __ + $325 \ldots$ OR $315 \mathrm{H} \ldots \ldots+325 \mathrm{H} \ldots$ |  |
| Biology laboratory: BIO 206L |  |


| Physics, biophysics option, requirements with grades of C- or better | Lacking |
| :--- | :---: |
| Complete the following courses or their equivalents: <br> PHY 336K, Classical Dynamics: |  |
| PHY 345, Biophysics: |  |
| PHY 352K, Classical Electrodynamics I: _ |  |
| PHY 353L, Modern Physics Laboratory: |  |
| PHY 355, Modern Physics and Thermodynamics: _-_ |  |
| PHY 369, Thermodynamics and Statistical Mechanics: |  |
| PHY 373, Quantum Physics I: Foundations: |  |


| Biology and Chemistry Requirements with grades of C- or better | Lacking |
| :---: | :---: |
| Organic chemistry and biochemistry: CH 320M or 328M __ + BCH 369 |  |
| Complete one of the following options: <br> A. Cell Biology: BIO 320 $\qquad$ <br> B. Microbiology: BIO 326R $\qquad$ <br> C. Developmental Biology: BIO 349 $\qquad$ <br> D. Neurobiology: NEU 365R or BIO 371 M $\qquad$ <br> E. Virology: BIO 330 $\qquad$ <br> F. Computation: SDS 335 $\qquad$ + BIO 337J or SDS 339 (Topics: Computational Biology or Computational Chemistry) $\qquad$ |  |
| Note: A list of recommended biology laboratory courses to complement the biology lecture courses are available in the advising center. Complementary biology laboratory courses are not required. |  |

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| Enough Additional Elective Hours to Reach a Total of 126 Hours (including 36 upper-division Hours) | Lacking |
| :--- | :---: |
| Note: Only mathematics courses at the level of calculus and above may count toward the total number of hours required for the degree. |  |
| The following courses will not count toward the degree: $M 301,302,303 D, 303 F, 403 \mathrm{~K}, 403 \mathrm{~L}, 304 \mathrm{E}, 305 \mathrm{E}, 305 \mathrm{G}$ (or 405 G or 505 G ), |  |
| $310 P, 316 \mathrm{~K}$, and $316 \mathrm{~L}:$ |  |


| Minimum Grade Point Average Requirements | Lacking |
| :--- | :---: |
| 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, BCH, BIO, CH, CS, EVS, GEO, HDF, HE, M, NEU, NSC, NTR, |  |
| PBH, PHY, SSC, SDS, TXA, and UTS-Natural Sciences. |  |


| Total Hours and Residency Requirements | Lacking |
| :--- | :--- |
| 126 semester hours: _- |  |
| 36 upper-division hours: _- |  |
| 21 upper-division hours in residence, including at least 12 hours of PHY: |  |
| 60 hours in residence: __ |  |
| No more than 6 hours of electives may be taken Pass/Fail. No more than 3 three-hour courses in Air Force Science, Military Science, and <br> Naval Science may be counted toward the degree. The following courses will not count toward this degree: M 301, KIN 119, or PED one- <br> hour activity courses. Please check course descriptions of lower-division science courses not required for majors in the same field of study <br> to see if they can or cannot count toward this degree. |  |
| A student may not earn more than one Bachelor of Arts or Bachelor of Science and Arts degree from the University. A student may earn |  |
| only one undergraduate degree in a particular field of study from the College of Natural Sciences. A student who holds a Bachelor of Arts |  |
| or a Bachelor of Science and Arts degree from the university may earn a second major designation in another field of study that will appear |  |
| on the University transcript. |  |$\quad$| The title of the degree appears on the diploma, but the major does not. The title of the degree, the major, and the transcript-recognized |
| :--- |
| certificate appear on the official transcript. |

