

# Bachelor of Science Degree **Biophysics** 2005-06

## Department of Physics

A116 Barton Hall  
(215) 204-7634

**Chairperson:** Dr. C. Jeff Martoff  
**Faculty Advisor:** Dr. Zbigniew Dziembowski  
[www.temple.edu/physics](http://www.temple.edu/physics)

• 123 credits, 90 of which must be in CST/CLA courses

• 45 credits must be upper level (UL) coursework in either CST/CLA or UL course(s) that can be credited towards the major or declared 2nd major/minor chosen in consultation with an advisor.

• Appropriate Core Curriculum requirements:

Traditional  Core 45  Core to Core

• The following requirements for the Biophysics Major:

**Math Sequence:** 0045 > C073 > C074 > C085 > 0086

### First Year

- General Chemistry I with Lab (Chem C071/73 or equiv.)♦
- General Chemistry II with Lab (Chem C072/74 or equiv.)♦
- Calculus I (Math C085 or H095)♦
- Calculus II (Math 0086 or H096)♦

### Second Year

- Organic Chemistry I with Lab (0121/3 or equiv.)♦
- Organic Chemistry II with Lab (0122/4 or equiv.)♦
- Calculus III Math 0127♦
- Physics C087 or Physics 0121♦
- Physics C088 or Physics 0122♦

### Third Year

- Introduction to Biology (Bio 0102 or H102)♦ *formerly Bio 0103*
- Elective \* ♦
- Elective \* ♦

### Fourth Year

- Cell Structure and Function (Bio W204)♦
- Electricity and Magnetism w/ Lab (Physics 0187)♦
- Thermodynamics and Kinetic Theory (Physics 0231)♦
- Genetics (Bio 0203)♦
- Mathematical Physics (Physics 0184)♦
- Intro. To Modern Physics w/ Lab (Physics 0188)♦
- Elective\* ♦
- Elective\* ♦

\*4 electives chosen in consultation with physics advisor. All must be 200 level or above. At least 2 must be Physics courses. Choose courses in Physics, Biology (Neurobiology, Genetics, Cell Structure, Physiology), Chemistry (Physical Chemistry), Biochemistry and Biophysics. Recommended for graduate school in Physics: Physics 0201, 0211, W215, 0306 and as much of the BS program in Physics as time allows.  
**Note: choosing Physics W215 as a Major elective will fulfill a writing intensive elective as well**

♦Courses have pre- and/or co-requisites, consult course descriptions for details.

## Traditional Core

For students starting as freshmen or transferring with fewer than 45 credits.

- English C050 \_\_\_\_\_
- American Culture \_\_\_\_\_
- The Arts \_\_\_\_\_
- Individual and Society \_\_\_\_\_
- Studies in Race \_\_\_\_\_
- Foreign Language 2<sup>nd</sup> level \* \_\_\_\_\_
- Foreign Language 3<sup>rd</sup> level \* \_\_\_\_\_
- International Studies \* \_\_\_\_\_
- International Studies (non western) \* \_\_\_\_\_
- Science and Technology (SA) \_\_\_\_\_
- Science and Technology (SB) \_\_\_\_\_
- Quantitative Reasoning (QA) \_\_\_\_\_
- Quantitative Reasoning (QB) \_\_\_\_\_
- Intellectual Heritage X051 \_\_\_\_\_
- Intellectual Heritage X052 \_\_\_\_\_
- Writing Intensive Elective \_\_\_\_\_
- Writing Intensive Elective (Must be taken at Temple) \_\_\_\_\_
- Writing Intensive in Major (Must be taken at Temple) \_\_\_\_\_

### B.S.

- 2 International Studies (IS) 1 non western or
- 2<sup>nd</sup> level of a language + 1 IS or
- 3<sup>rd</sup> level of a language /Exempt^

## Core 45 +

For students receiving 45 credits or more in transfer.

- English C050 \_\_\_\_\_
- American Culture \_\_\_\_\_
- The Arts \_\_\_\_\_
- Individual and Society \_\_\_\_\_
- Studies in Race \_\_\_\_\_
- Science and Technology (SA or SB) \_\_\_\_\_
- Quantitative Reasoning (QA or QB) \_\_\_\_\_
- Intellectual Heritage X051 or X052 \_\_\_\_\_
- Writing Intensive Elective (Must be taken at Temple) \_\_\_\_\_
- Writing Intensive in Major (Must be taken at Temple) \_\_\_\_\_
- Foreign Language \* \_\_\_\_\_
- International Studies \* \_\_\_\_\_

### B.S.

- 1 International Studies (IS) or
- 2<sup>nd</sup> level of a language/Exempt^

## Core to Core

For students who have completed an approved Associate's degree from a college that has an established transfer agreement with Temple.

- Writing Intensive Elective (Must be taken at Temple) \_\_\_\_\_
- Writing Intensive in Major (Must be taken at Temple) \_\_\_\_\_
- Library Skills (TILT) [www.library.temple.edu](http://www.library.temple.edu)  
(Must be taken in order to graduate)

*^If English is your second language, speak with an advisor about possible exemption.*