**TUteach:**  
**Biology with Teaching**  
2015-2016

**Department of Biology**  
255 Bio-Life Building  215-204-8851  
**Content Advisors:**  
Dr. Joel Sheffield (A-M) & Prof. Evelyn Vleck (N-Z)  
**Program Director:**  
Dr. Susan Varnum  
**Master Teacher/Faculty Advisor:**  
Ms. Kathleen McKinley  
**Academic Advisor:** Kenneth Ruff  
www.temple.edu/biology

**CST Credit Requirements:**  
124 minimum total credits  
90 minimum CST/CLA credits  
45 minimum upper-level (2000+) CST/CLA credits  

**Backtracking rule:** Credit for courses 2 or more levels below previously completed coursework cannot be used towards the degree.

The B.S. with Teaching in Biology provides broad training in Biology, and prepares students for a career in secondary school teaching.  

Please note: PA Certification requires passing scores in the PRAXIS 1/PAPA Teacher Certification Exam.

**Recommended Sequence of Major Courses for Bachelor of Science:**

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Calculus I: Math 1038* or 1041 or 1941H</td>
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<tr>
<td>General Chemistry I: Chem 1031 or 1951FH</td>
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<tr>
<td>General Chemistry Lab I: Chem 1033 or 1953FH</td>
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<tr>
<td>TUteach Step 1 &amp; 2: SCTC 1389</td>
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<tr>
<td>Introduction to Biology: Bio 1111 or 1911SH</td>
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<tr>
<td>Calculus II: Math 1042 or 1942H</td>
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<tr>
<td>General Chemistry II: Chem 1032 or 1952SH</td>
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<tr>
<td>General Chemistry Lab II: Chem 1034 or 1954SH</td>
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<tr>
<td>Schedule PAPA Exam</td>
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<tr>
<td>Introduction to Biology: Bio 2112 or 2912FH</td>
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<tr>
<td>Organic Chemistry I: 2201 or 2211F or 2921FH</td>
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<tr>
<td>Organic Chem Lab I: 2203 or 2213F or 2923FH</td>
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<tr>
<td>TUteach Knowing and Learning: Ed 2179</td>
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<tr>
<td>TUteach Special Ed 2231</td>
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<tr>
<td>Organic Chemistry II: 2202 or 2212S or 2922SH</td>
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<tr>
<td>Organic Chem Lab II: 2204 or 2212S or 2922SH</td>
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<tr>
<td>TUteach Differentiated Literacy Instruction in the Disciplines, 7-12: Secondary Ed 3796</td>
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<td>Make an Appointment for Candidacy Review</td>
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<tr>
<td>Cell Structure and Function: Bio 3096F</td>
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<tr>
<td>General Physics I: Physics 2021 or 2921FH</td>
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<tr>
<td>TUteach Persp. on Science &amp; Math: Phil 2196 OR The History of Science: SCTC 3001</td>
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<tr>
<td>Genetics: Bio 2296S OR Principles of Ecology: Bio 2227S</td>
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<tr>
<td>General Physics II: Physics 2022 or 2922SH</td>
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<tr>
<td>TUteach Research Methods: Bio 3091S</td>
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<tr>
<td>TUteach Classrm Interact: Sci Ed 2189S</td>
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<tr>
<td>Make an Appointment for a Graduation Review</td>
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<tr>
<td>Biology elective numbered above 2200***</td>
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<tr>
<td>Biology elective numbered above 2200***</td>
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<tr>
<td>TUteach Project-Based Instruction: Sci Ed 4189F</td>
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<tr>
<td>Biology elective numbered above 2200***</td>
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<tr>
<td>TUteach Apprentice Teaching: Ed 4388</td>
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<tr>
<td>TUteach Apprentice Teaching Sem: Ed 4802</td>
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**Placement: Math:**  
**English:**  
**FL:**  

**Suggested Courses:**  

**Notes:**  

* Students who choose Math 1038 must also take the corresponding section of the linked course Math 1039  

**Select the order of Bio 2227 and Bio 2296 to meet the prerequisites for your planned electives  

***Check course descriptions. Courses marked "Not available for biology major credit" cannot be used as electives.

The Undergraduate Bulletin is the official source for major requirements: bulletin.temple.edu

Office Use Only: CR Path__________ Test Codes Added/Removed_________________
### Appropriate University Curriculum:

**Gen Ed Traditional**

- □ Analytical Reading & Writing: Eng 0802________
- □ Mosaic I: Intel Heritage (IH) 0851 ________________
- □ Mosaic II: Intel Heritage (IH) 0852________
- □ US Society (GU)_______________
- □ Human Behavior (GB)** ________________
- □ Arts (GA)_______________
- □ Diversity and Race (GD)_______________
- □ Global/World Society (GG)_______________
- □ Quantitative Literacy (GQ)** ________________
- □ Science and Technology (GS)** ________________

**Gen Ed to-Gen Ed:**

Transfer students with a pre-approved Associate’s degree from an institution that has an established transfer agreement with Temple have satisfied their GenEd requirements, with the following exception for BA students:

**Bachelor of Arts (BA) Only**

- □ 2nd level of a Language ___________

**Gen Ed online:**

- www.temple.edu/gened
- www.temple.edu/vpus/transfer/TransferGenEd.htm

**University Core:**

Students who were admitted as freshmen prior to fall 2008, or were admitted as transfers prior to fall 2010, follow the University Core curriculum instead of the Gen Ed curriculum.

**Undergraduate Bulletin:**

The Undergraduate Bulletin is the official reference for University Requirements at: bulletin.temple.edu

**Note:**

No more than two courses from the same department may be used to satisfy GenEd requirements. GenEd courses may not be used to satisfy major requirements.