**BIOLOGY MAJOR**

**PLANT BIOLOGY OPTION**

Student Name__________________________

PSU ID ______________________

**Grade of C or better is required.**

Effective February 2014

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### CREDITS NOT APPLICABLE FOR GRADUATION

<table>
<thead>
<tr>
<th>PSU 016 (1)</th>
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</thead>
</table>

### TOTAL DEPARTMENTAL CREDIT REQUIREMENTS FOR GRADUATION: 124 CREDITS

<table>
<thead>
<tr>
<th>Communication (9 cr)</th>
<th>Physics (8 - 12 cr)</th>
<th>400-level Biology Courses (18 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 15 or ENGL 30 (3)</td>
<td>PHYS 250 (4)</td>
<td>BIOL 407 (3)</td>
</tr>
<tr>
<td>ENGL 202A,202B,202C,202D(3)</td>
<td>PHYS 251 (4)</td>
<td>BIOL 414 (3)</td>
</tr>
<tr>
<td>CAS 100 (3)</td>
<td>or</td>
<td>BIOL 441 (3)</td>
</tr>
<tr>
<td>Quantification (8 cr)</td>
<td>PHYS 211 (4)</td>
<td>*Including 9 credits from chart below</td>
</tr>
<tr>
<td>**MATH 140 (4)</td>
<td>PHYS 212 (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 141 (4)</td>
<td>PHYS 213 (2)</td>
<td></td>
</tr>
<tr>
<td>Physics (8 - 12 cr)</td>
<td>PHYS 214 (2)</td>
<td></td>
</tr>
</tbody>
</table>

### General Chemistry (8 cr)

| **CHEM 110 (3) | CHEM 210 (3) |
| **CHEM 111 (1) | CHEM 212 (3) |
| **CHEM 112 (3) | CHEM 213 (2) |
| CHEM 113 (1) |

### Biology Core Courses (16 cr)

| **BIOL 110 (4) | **BIOL 406 |
| **BIOL 220W (4)* | **BIOL 407 |
| **BIOL 230W (4)* | **BIOL 414 |
| **BIOL 240W (4)* | **BIOL 417 |
| *These courses = 1 “W” Credit |

### Arts (6 cr)

| GA (3) |
| GA (3) |

### Humanities (6 cr)

| GH (3) |
| GH (3) |

### Social & Behavioral Sciences (6 cr)

| GS (3) |
| GS (3) |

### Group I Plants and Fungi

| BIOL 406 | BIOL 414 |
| BIOL 407 | BIOL 414 |
| BIOL 414 | BIOL 417 |
| BIOL/GEOSC 420 | BIOL/GEOSC 420 |
| BIOL 424 | BIOL/VB SC 421 |
| BIOL/PPEM 425 | BIOL 422 |
| BIOL 441 | BIOL/PPEM 425 |
| BIOL 451 | BIOL 427 |
| BIOL 482 | BIOL 429 |
| BIOL 499A | BIOL 432 |
| BIOTC/HORT 459 | BIOL 433 |
| HORT 407 | BIOL 434 |
| PPATH 416 | BIOL 436 |

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### Arts (6 cr)

| GA (3) |
| GA (3) |

### Humanities (6 cr)

| GH (3) |
| GH (3) |

### Social & Behavioral Sciences (6 cr)

| GS (3) |
| GS (3) |

### Health & Physical Activity (3 cr)

Courses with a GHS, GPE, or GHA label can fulfill this category

| • United States Cultures Requirement (3 credits US) |
| • International Cultures Requirement (3 credits IL) |

### Supporting Courses & Related Areas

Electives (15-20 cr) to complete 124 credits

| PSU 016 (1) |

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Effective February 2014
1. **Disallowed credits:** The following courses **MAY NOT** be used for credit (**NOT EVEN AS ELECTIVES**) towards a degree in Biology and will **NOT** be counted towards graduation:

<table>
<thead>
<tr>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMB 1</td>
</tr>
<tr>
<td>BI SC 1, 2, 3, 4</td>
</tr>
<tr>
<td>BIOL 11, 12, 33, 55</td>
</tr>
<tr>
<td>CHEM 101, 103, 106, 108</td>
</tr>
<tr>
<td>ENGL 4, 5</td>
</tr>
<tr>
<td>ESL 4</td>
</tr>
<tr>
<td>MATH – no course under 140**</td>
</tr>
<tr>
<td>CAS 126</td>
</tr>
<tr>
<td>MICRB – No course under 199</td>
</tr>
<tr>
<td>PH SC 1, 150, 151</td>
</tr>
<tr>
<td>LL ED 5, 10</td>
</tr>
<tr>
<td>PHYS 1</td>
</tr>
<tr>
<td>More than 9 credits of SC 295, 395, 495</td>
</tr>
<tr>
<td>Course Duplications</td>
</tr>
</tbody>
</table>

**Please note that in the following courses only a specified number of the credits count towards graduation:**

- MATH 140A (only 4 out of 6 credits count)
- CHEM 106 (only 3 out of the 5 credits count)

However, all credits earned at Penn State count in determining your grade point average (GPA).

Moreover, students may take only one course for General Education credit from:  HD FS 129 (GS) or SOC 030 (GS); PHIL 001 (GH) or PHIL 004 (GH); LARCH 003 (GA) or LARCH 060 (GA); SOC 001 (GS) or R SOC 011 (GS).

Any exceptions need to be petitioned through an adviser in 114 Ritenour and will be evaluated by Dr. Richard Cyr on a case-by-case basis.

2. **Writing Across the Curriculum requirement** (3 credits of “W” are required). For majors in Biology, this requirement can be met by taking BIOL 220W, 230W and 240W, each carrying one credit of “W”. Another course currently offered in the Department of Biology with “W” credit is 450W. Note that other courses within the Eberly College of Science can be used to fulfill this requirement.

3. **Elective (Supporting) Courses:** Elective credit totals vary with the option. Total elective credits range between 10 to 26 credits, depending on option and course selection. Choose your electives carefully.

4. **Petition for course substitutions or waivers of requirements.** Any exceptions need to be petitioned through an adviser in the Biology Undergraduate Advising Office in 114 Ritenour (814-865-2329) and will be evaluated by Dr. Richard Cyr on a case-by-case basis.

5. **A minimum of 124 credits is required to graduate with a major in Biology.** Add up your credits carefully and always check your total credit early in the semester you plan to graduate!

6. **Check the bulletin board in the Biology Undergraduate Advising Office for new course offerings** in the Department of Biology.

7. **Select both United States Cultures and International Culture course carefully.** You may be able to select a course which will also satisfy the general education requirements in Arts, Humanities or Social and Behavioral Sciences. For example, SOC 119 – Race and Ethnic Relations – will satisfy both GS and US requirements but will only count as 3 or 4 credits towards the 124 credits required for graduation (Soc 119 is a variable credit course).

To clarify, from the Undergraduate Advising Handbook “A student must complete 3 credits in US and 3 credits in IL. If a student takes a 3-credit course that is both US and IL, he/she must take another 3-credit course that is US, IL, or both US and IL to complete the requirement. Education abroad courses and other credit-bearing experiences such as internships that meet this requirement will be designated as US, IL, or both US and IL.”