

CREDITS NOT APPLICABLE FOR GRADUATION

TOTAL DEPARTMENTAL CREDIT REQUIREMENTS FOR GRADUATION: 124 CREDITS

Communication (9 cr)	
ENGL 15 or ENGL 30 (3)	
ENGL 202A,202B,202C,202D(3)	
CAS (SPCOM) 100 (3)	

Quantification (8 cr)	
&MATH 140 (4)	
MATH 141 (4)	

General Chemistry (8 cr)	
&CHEM 12 (3)	
&CHEM 13 (3)	
CHEM 14 (1)	
CHEM 15 (1)	

Biology Core Courses (16cr)	
& BIOL 110 (4)	
& BIOL 220W (4)*	
& BIOL 230W (4)*	
& BIOL 240W (4)*	
*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)	

Physics (8 - 12 cr)	
PHYS 250 (4)	
PHYS 251 (4)	
or	
PHYS 211 (4)	
PHYS 212 (4)	
PHYS 213 (2)	
PHYS 214 (2)	

Organic Chemistry (8 cr)	
CHEM 036 (2)	
CHEM 038 (3)	
CHEM 039 (3)	

Statistics (3-4 cr)	
STAT 200 (4), 240 (3), 250 (3), or an advanced statistics course (3)	

Biochemistry & Molecular Biology (5 cr)	
BMB 401(2)	
BMB 402 (3)	

Additional Courses (5-8 cr)	
BIOL 222 (3)	
Select 2-5 credits from MATH 220 (2), 231 (2), MICRB 201 (3), 202 (2)	

Health & Physical Activity (3 cr) Courses with a GHS, GPE, or GHA label can fulfill this category	

PSU 016 (1)	
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• _____ *INTERCULTURAL & INTERNATIONAL COMPETENCE* (3)
(Any course with a DF or GI label can fulfill this requirement)

400-Level Biology Courses (15 cr)	
BIOL 430 (3) – SU/FA	

*Select 12 credits from the following list:

- | | |
|------------------|-----------------------------|
| BIOL 401 - FA | BIOL 448 - SU |
| BIOL 403 - FA | BIOL 460 - FA |
| BIOL 404 - FA | BIOL 461 - SP |
| BIOL 405 - FA | BIOL 469 - FA |
| BIOL 410 - FA | BIOL 499A - Christmas Break |
| BIOL 411 - SP | AN SC 442 |
| BIOL 412 - SP | BMB 400 - FA |
| BIOL 413- SP | BMB 450 - FA |
| BIOL 416 - SP/SU | HORT 407 - SP |
| BIOL 422W - SP | SC 295~ - FA/SP/SU |
| BIOL 428 - SP | SC 395~ - FA/SP/SU |
| BIOL 427 - FA | SC 495~ - FA/SP/SU |
| BIOL 432 - SP | BIOL 440 |

~A maximum of 3 credits may be petitioned if the Co-op work was completed off-campus in the life sciences and if proper documentation is provided.

Supporting Courses & Related Areas Electives (12 - 21 cr) to complete 124 credits	

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:

BMB 1	MICRB – no course under 199
BI SC 1, 2, 3, 4	PH SC 1, 150, 151
BIOL 11, 12	PHYS 001
CHEM 101, 103, 106, 108	LL ED 5, 10
ENGL 4, 5	More than 6 credits of SC 295, 395, 495
ESL 4, 5	STAT 100
MATH – no course under 140**	Course Duplications
CAS 126	

****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).

Note also that ESACT 129 cannot be scheduled if you have already received credit for ESACT 117 or 220.

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 in 329 Whitmore 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”. One other course currently offered in the Department of Biology with “W” credit is BIOL 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 12 to 30 credits, depending on option and course selection. Choose your electives carefully.

4. **Petition for course substitutions or waivers of requirements.** Forms are available in the Biology Undergraduate Advising Office (329 Whitmore) and on-line (<http://www.bio.psu.edu/Degrees/UgradAO> - click on the “Forms and Procedures” link).

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 329 Whitmore 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).