

BIOLOGY MAJOR

Student Name _____

GENERAL BIOLOGY OPTION

PSU ID _____

CREDITS NOT APPLICABLE FOR GRADUATION

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TOTAL DEPARTMENTAL CREDIT REQUIREMENTS FOR GRADUATION: 124 CREDITS

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

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

400-Level Biology Requirements (18 cr) Select a minimum of 18 credits of 400-level Biology courses, with at least 3 credits from each of the following groups (each course may be used to satisfy a requirement in only one group)

Group I Plant and Fungi	Group II Evolutionary Biology	Group III Genetics
BIOL 406	BIOL 405	BIOL 404
BIOL 407	BIOL 406	BIOL 405
BIOL 414	BIOL 414	BIOL 416
BIOL/GEOSC 420	BIOL 417	BIOL 422
BIOL 424	BIOL/GEOSC 420	BIOL 426
BIOL/PPEM 425	BIOL/VB SC 421	BIOL 428
BIOL 441	BIOL 422	BIOL/BMB/ENT 430
BIOL 451	BIOL/PPEM 425	BIOL 432
BIOL 482	BIOL 427	BIOL 443
BIOL 499A	BIOL 429	BIOL 451
BIOTC/HORT 459	BIOL 432	BIOL/ANTH 460
HORT 407	BIOL 433	BIOL 467
PPEM 416	BIOL 434	BIOTC/HORT 459
	BIOL 436	BMB 400
	BIOL 439	BMB 450
	BIOL 443	BMB 464
	BIOL 446	HORT 407
	BIOL 451	
	BIOL/ANTH 460	
	BIOL 463	
	BIOL 464	
	BIOL/GEOSC 474	

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

Organic Chemistry (6 - 8 cr)	
CHEM 202 (3)	
CHEM 203 (3)	
or	
CHEM 210 (3)	
CHEM 212 (3)	
CHEM 213 (2)	

Group IV Ecology	Group V Animal Physiology	Group VI Practicum
BIOL 406	BIOL 404	BIOL 400
BIOL 412	BIOL 406	BIOL 407
BIOL 415	BIOL 411	BIOL 414
BIOL 417	BIOL 412	BIOL 417
BIOL 419	BIOL 415	BIOL 419
BIOL/PPEM 425	BIOL 416	BIOL/VB SC 421
BIOL 429	BIOL/VB SC 421	BIOL 422
BIOL 436	BIOL 424	BIOL/PPEM 425
BIOL 438	BIOL 426	BIOL 433
BIOL 446	BIOL 433	BIOL 437
BIOL 450W	BIOL 437	BIOL 450W
BIOL 463	BIOL 446	BIOL 473 ##
BIOL 464	BIOL/BBH 469	BIOL 482 (4 cr only)
BIOL 482	BIOL/BBH 470	BIOL 496
BIOL 499A	BIOL 472 ##	BIOL 499A
	BIOL/AN SC 479	SC 295, SC 395, SC 495
	BIOL 482	BIOL 251
	BIOL 497C	

General Chemistry (8 cr)	
**CHEM 110 (3)	
CHEM 111 (1)	
**CHEM 112 (3)	
CHEM 113 (1)	

Statistics (3-4 cr)	
STAT 200 (4), 240 (3), or 250 (3)	

A maximum of 3 credits of Bio 496 or 4 credits of SC 295, SC 395, SC 495 may be used to fulfill the 18 credit minimum in the 400-level biology requirement.
BIOL472 plus BIOL473 can be used to fulfill Group V and Group VI resulting in 17 cr. instead of 18 cr. of 4xx level work.

Biology Core Courses (16 cr)	
** BIOL 110 (4)	
** BIOL 220W (4)*	
** BIOL 230W (4)*	
** BIOL 240W (4)*	
*These courses = 1 "W" Credit	

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

Arts (6 cr)	
GA (3)	
GA (3)	

- _____ *United States Cultures Requirement (3 credits US)*
- _____ *International Cultures Requirement (3 credits IL)*

Humanities (6 cr)	
GH (3)	
GH (3)	

PSU 016 (1)	
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Social & Behavioral Sciences (6 cr)	
GS (3)	
GS (3)	

Supporting Courses (19 – 26 cr) to complete 124 credits		

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

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:

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

****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 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.

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 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.”