

Recommended Academic Plan for Biology Vertebrate Physiology option (BIOL VPHSO at University Park)

Effective: Fall 2007- or later

Vertebrate Physiology

Semester 1 - Fall	Credits	Semester 2 - Spring	Credits
BIOL 110 (GN) Basic Concepts and Biodiversity	4	BIOL 220W (GN) Biology: Populations and Communities, OR BIOL 240W (GN) Biology: Function and Development of Organisms	4
<i>CHEM 110 (GN) Chemical Principles I</i>	3	<i>CHEM 112 (GN) Chemical Principles II</i>	3
<i>CHEM 111 (GN) Experimental Chemistry I</i>	1	<i>CHEM 113 (GN) Experimental Chemistry II</i>	1
MATH 140 B (GQ) Calculus and Biology I, or MATH 140 (GQ) Calculus with Analytical Geometry I	4	MATH 141B (GQ) Calculus and Biology II, or MATH 141 (GQ) Calculus with Analytical Geometry II	4
Arts (GA), Humanities (GH), or Social and Behavioral Science (GS)	3	ENGL 15 or 30 (GWS) Composition/Honors Composition	3
PSU 016 – First-year seminar	1	BIOL 003- Peer Learning in Biology	1
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Total Credits:	17	Total Credits:	16
Semester 3 – Fall	Credits	Semester 4 – Spring	Credits
BIOL 230 W (GN) Biology: Molecules and Cells	4	BIOL 220W (GN) Biology: Populations and Communities, or BIOL 240W(GN) Biology: Function and Development of Organisms	4
CHEM 210 Organic Chemistry I	3	CHEM 212 Organic Chemistry II	3
STAT 200 (GQ) Elementary Statistics, STAT 240 (GQ) Intro to Biometry, or STAT 250 (GQ) Intro to Biostatistics	3 or 4	<i>PHYS 250 (GN) Introductory Physics I, or PHYS 211 (GN) General Physics: Mechanics</i>	4
Arts (GA), Humanities (GH), or Social and Behavioral Science (GS)	3	CAS 100 (GWS) Effective Speech	3
ELECTIVE – Supporting Course	1	General Health and Physical Activity (GHA)	1.5
		ELECTIVE – Supporting Course	1
Total Credits:	14-15	Total Credits:	16.5
Semester 5 – Fall	Credits	Semester 6 – Spring	Credits
BIOL 472 Mammalian Physiology or BIOL 4XX	3	BIOL 472 or BIOL 4XX	3
CHEM 213B Laboratory in Organic Chemistry- Bioscience, or CHEM 213 Laboratory in Organic Chemistry	2	BIOL 473 Laboratory in Mammalian Physiology	2
<i>PHYS 251 (GN) Introductory Physics II, or PHYS 212</i>	4	BIOL 4XX or PHYS 213 (GN) and 214 (GN)	3 or 4
Arts (GA), Humanities (GH), or Social and Behavioral Science (GS), and US Cultures (US)	3	Arts (GA), Humanities (GH), or Social and Behavioral Science (GS), and International Cultures (IL)	3
ELECTIVE – Supporting Course	3	ELECTIVE – Supporting Course	3
		General Health and Physical Activity (GHA)	1.5
Total Credits:	15	Total Credits:	15.5-16.5

Semester 7 – Fall	Credits	Semester 8 – Spring	Credits
BMB 401 General Biochemistry	3	BMB 402 General Biochemistry	3
BIOL 4XX	3	BIOL 4XX	3
ENGL 202C (GWS) Effective Writing: Technical Writing	3	Arts (GA), Humanities (GH), or Social and Behavioral Science (GS)	3
Arts (GA), Humanities (GH), or Social and Behavioral Science (GS),	3	ELECTIVE- Supporting Course	3
ELECTIVE – Supporting Course or BIOL 4XX (if student took PHYS 211-214 series)	3 or 4	ELECTIVE – Supporting Course	3
Total Credits:	15-16	Total Credits:	15

Bold type indicates courses requiring a quality grade of C or better.

Italics indicate courses that satisfy both major and General Education requirements.

Bold Italics indicate courses requiring a quality grade of C or better and that satisfy both major and General Education requirements.

GWS, GHA, GQ, GN, GA, GH, and GS are codes used to identify General Education requirements.

US, IL, and US;IL are codes used to designate courses that satisfy University United States/International Cultures requirements.

W is the code used to designate courses that satisfy University Writing Across the Curriculum requirement.

Scheduling patterns for courses not taught each semester:

Fall and Summer only: BIOL 110*
Fall only: BIOL 230W
Spring only: BIOL 220W
BIOL 240W
BIOL 473

Program Notes: This is only one way to plan your schedule – please consult with a biology advisor to refine your plan. Be aware that most 400 level Biology courses are taught only in one semester and over time, the semester offering can change.

*BIOL 110 in the fall is for freshman and sophomores only.

BIOL 110 in the spring is for juniors and seniors only.