

**Recommended Academic Plan for Biology Genetics and Developmental Biology option (BIOL GENET at University Park)**

**Effective: Fall 2007 or later**

**Genetics**

Semester 1 - Fall	Credits	Semester 2 - Spring	Credits
<b>BIOL 110 (GN) Basic Concepts and Biodiversity</b>	4	<b>BIOL 220W (GN) Biology: Populations and Communities, OR BIOL 240W (GN) Biology: Function and Development of Organisms</b>	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
<b>MATH 140 B (GQ) Calculus and Biology I, or MATH 140 (GQ) Calculus with Analytical Geometry I</b>	4	<b>MATH 141B (GQ) Calculus and Biology II, or MATH 141 (GQ) Calculus with Analytical Geometry II</b>	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
BIOL 003- Peer Learning in Biology	1		
<b>Total Credits:</b>	17	<b>Total Credits:</b>	16
Semester 3 – Fall	Credits	Semester 4 – Spring	Credits
<b>BIOL 230 W (GN) Biology: Molecules and Cells</b>	4	<b>BIOL 220W (GN) Biology: Populations and Communities, or BIOL 240W(GN) Biology: Function and Development of Organisms</b>	4
CHEM 210 Organic Chemistry I	3	CHEM 212 Organic Chemistry II	3
MICRB 201 Introductory Microbiology and 202 Introductory Microbiology Lab, or MATH 220 (GQ) Matrices or MATH 231 Calculus of Several Variables	5 or 2	CHEM 213B Laboratory in Organic Chemistry-Bioscience, or CHEM 213 Laboratory in Organic Chemistry	2
Arts (GA), Humanities (GH), or Social and Behavioral Science (GS)	3	BIOL 322 Genetic Analysis	3
General Health and Physical Activity (GHA)	1.5	CAS 100 (GWS) Effective Speech	3
		General Health and Physical Activity (GHA)	1.5
<b>Total Credits:</b>	13.5-16.5	<b>Total Credits:</b>	16.5
Summer Session	Credits		
<i>PHYS 211 (GN) General Physics: Mechanics (If taking this PHYS series)</i>	4		
Semester 5 – Fall	Credits	Semester 6 – Spring	Credits
BIOL 430 Developmental Biology	3	PHYS 251 (GN) Introductory Physics II, or PHYS 213 (GN) and 214 (GN)	4
<i>PHYS 250 (GN) Introductory Physics I, or PHYS 212 (GN)</i>	4	BIOL 4XX	3
<i>STAT 200 (GQ) Elementary Statistics, STAT 240 (GQ) Intro to Biometry, or STAT 250 (GQ) Intro to Biostatistics</i>	3 or 4	BIOL 4XX	3
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
<b>Total Credits:</b>	16 or 17	<b>Total Credits:</b>	16

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), and US Cultures (US)	3	ELECTIVE- Supporting Course	3
ELECTIVE – Supporting Course	3 or 4	ELECTIVE – Supporting Course	3
<b>Total Credits:</b>	16	<b>Total Credits:</b>	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  
BIOL 430  
**Spring only:** BIOL 220W  
BIOL 240W  
BIOL 322

**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.