



Biology (Cellular and Molecular), Bachelor of Science

This academic degree map is a term-by-term course schedule designed for you to graduate in four years. The sample schedule below serves as a general guideline to building a full-time schedule for each term. Earning a degree requires that you complete (1) the required General Education courses, (2) the course requirements of your major and (3) any requirements PSU has designated for a Bachelor degree. Courses and special notes are specified to keep you on track to graduate in four years. Where open elective is listed, it means that you may take a course of your choosing, perhaps a course in an area outside of your major, but be sure to discuss this with your advisor.

This map is not a substitute for academic advisement – contact your advisor if you have any questions throughout the term and as you begin planning for the next. The University Catalog is also available as a resource with a complete list of requirements for all degrees offered at PSU.

Recommended 4-years to graduation plan

Code	Semester 1 - FRESHMAN YEAR	Credit	NOTES
BIOL 211	Principles of Biology I (SGE) ⁰⁴⁰ Suggested	4	
CHEM 215	General Chemistry I	3	
CHEM 216	General Chemistry I Lab	2	
ENGL 101	English Composition (SGE) ⁰¹⁰	3	C or better
UGS 150	Gorilla Gateway (SGE) ⁰⁷⁰	2	
TOTAL CREDIT HOURS		14	

	Semester 3 - SOPHOMORE YEAR	Credit	
BIOL 371	General Microbiology	3	
BIOL 372	General Microbiology Lab	2	
CHEM 325	Organic Chemistry I	3	
CHEM 326	Organic Chemistry I Lab	2	
BIOL 330	Ecology	3	
Bucket 050	Social & Behavioral Science (SGE) ⁰⁵⁰	3	
TOTAL CREDIT HOURS		16	

	Semester 5 - JUNIOR YEAR	Credit	
BIOL 311	Cell Biology	3	
PHYS 100	College Physics I (or PHYS 101)	4	
PHYS 130	College Physics I Lab	1	
CHEM 575	Biochemistry I (or CHEM 475)	3	
ENGL 299	Intro to Research Writing (SGE) ⁰¹⁰	3	C or better
TOTAL CREDIT HOURS		14	

	Semester 7 - SENIOR YEAR	Credit	
BIOL 550	Advanced Cellular/Molecular Biology	3	
Bucket 070	Institutionally Designated (SGE) ⁰⁷⁰	3	
500+	Biology Elective	4	
100+	Minor Course or Open Elective	6	
TOTAL CREDIT HOURS		16	

Code	Semester 2 - FRESHMAN YEAR	Credit	NOTES
BIOL 212	Principles of Biology II	4	
CHEM 225	General Chemistry II	3	
CHEM 226	General Chemistry II Lab	2	
PSYCH 155	General Psychology (SGE) ⁰⁵⁰ Suggested	3	
Bucket 030	Math & Statistics (SGE) ⁰³⁰	3	
TOTAL CREDIT HOURS		15	

	Semester 4 - SOPHOMORE YEAR	Credit	
BIOL 322	Genetics	3	
BIOL 323	Genetics Lab	2	
CHEM 335	Organic Chemistry II	3	
CHEM 336	Organic Chemistry II Lab	2	
COMM 207	Speech Communication (SGE) ⁰²⁰	3	
Bucket 060	Arts & Humanities (SGE) ⁰⁶⁰	3	
TOTAL CREDIT HOURS		16	

	Semester 6 - JUNIOR YEAR	Credit	
PHYS 101	College Physics II (or PHYS 104)	4	
PHYS 131	College Physics II Lab	1	
600+	Biology Major	5	
BIOL 602	Biology Topics Course	1-3	
Bucket 060	Arts & Humanities (SGE) ⁰⁶⁰	3	
Bucket 070	Institutionally Designated (SGE) ⁰⁷⁰	1	
TOTAL CREDIT HOURS		15-17	

	Semester 8 - SENIOR YEAR	Credit	
BIOL 699	Senior Seminar	1	
500+	Biology Elective	3	
100+	Minor Course or Open Elective	7	
BIOL 551	Intro to Recombinant DNA Tech Lab	3	Spring only
TOTAL CREDIT HOURS		14	

Writing to Learn: Typically one from general education and one in major coursework.

Systemwide General Education (SGE) Key

010 English	050 Social & Behavioral Sciences
020 Communications	060 Arts & Humanities
030 Math & Statistics	070 Institutionally Designated
040 Natural & Physical Sciences	

