

Name:

ID:

Catalog 2024-25

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.

Credit

3

2

3

2

3

3

16

| 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

Social & Behavioral Science (SGE)050

General Microbiology

Organic Chemistry I

Ecology

General Microbiology Lab

Organic Chemistry I Lab

BIOL 371

BIOL 372

CHEM 325

CHEM 326

BIOL 330

500+

100+

Bucket 050

Recommended 4-years to graduation plan

| 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 | |

| l | | Semester 4 - SOPHOMORE YEAR | Credit | 1 |
|---|------------|-------------------------------------------|--------|---|
| | | Jemester 4 - JOPHOWORE TEAK | Cleuit | |
| | 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 | |

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| | Semester 5 - JUNIOR YEAR | Credit | | |
|----------|------------------------------------------------|--------|-------------|----|
| BIOL 311 | Cell Biology | 3 | | PH |
| PHYS 100 | College Physics I (or PHYS 101) | 4 | | PH |
| PHYS 130 | College Physics I Lab | 1 | | 60 |
| CHEM 575 | Biochemistry I (or CHEM 475) | 3 | | BI |
| ENGL 299 | Intro to Research Writing (SGE) ⁰¹⁰ | 3 | C or better | Bu |
| | | | | Bu |
| | TOTAL CREDIT HOURS | 14 | | |
| | | | _ | |
| | Semester 7 - SENIOR YEAR | Credit | | |
| BIOL 550 | Advanced Cellular/Molecular Biology | 3 | | BI |
| BIOL 551 | Intro to Recombinant DNA Tech Lab | 3 | | 50 |
| | | | | |

TOTAL CREDIT HOURS

TOTAL CREDIT HOURS

| | Semester 0 - SUMON TEAN | oreuit | |
|------------|-------------------------------------------------|--------|--|
| 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 | |
| Bucket 070 | Institutionally Designated (SGE) ⁰⁷⁰ | 3 | |
| | TOTAL CREDIT HOURS | 14 | |

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

Systemwide General Education (SGE) Key

Minor Course or Open Elective

010 English 020 Communications 030 Math & Statistics 040 Natural & Physical Sciences

Biology Elective

050 Social & Behavioral Sciences 060 Arts & Humanities 070 Institutionally Designated

4

6

16