

Lower Division Department Requirements for the Biology Major:

PSU Courses	Quarter Credits	PCC Course Equivalents	Quarter Credits
Bi 251, 252, 253 Principles of Biology	15	BI 211, 212, & 213 Principles of Biology	15
Ch 221, 222, 223 General Chemistry Ch 227, 228, 229 General Chemistry Labs	15	CH 221, 222, & 223 General Chemistry	15
Ph 201 General Physics Ph 214 General Physics Lab	4	PHY 201 General Physics	4
Stat 243, 244 Intro Prob & Stat I & II OR Mth 251, 252 Calculus I & II	8 8	MTH 243 & 244 Statistics I & II OR MTH 251 & 252 Calculus I & II	8 9
One term of Organic Chemistry	6	CH 241 Organic Chemistry (requires completion of CH 106 or 223 General Chemistry.)	5
Elective credits from Geology, Physics, and/or Chemistry at the 200-level or higher	12	Choose 12 credits from: Geology: G 201, 202, & 203 General Geology, G 291 Elements of Rocks and Minerals Physics: PHY 202, 203 General Physics, PHY 211, 212, & 213 General Physics (calculus) Chemistry: CH 242 & 243 Organic Chemistry or take credits at PSU	12

Additional Requirements:

In addition to the general university requirements, a student must meet general biology department major requirements and specific requirements in one of the biology major options. See backside of sheet for Biology Major Options.

In addition to the departmental requirements listed above, students must also complete coursework for university admission, general education requirements, and BA/BS requirements. Meet with a PCC Academic Advisor to develop an effective transfer plan that will meet your individual needs.

PCC DEGREE/TRANSFER INFORMATION:

Associate of Arts/Oregon Transfer (AAOT) Degree – The courses listed above may be included in the AAOT degree. Students who complete this degree and are accepted at Oregon public universities will be admitted as having completed all lower division comprehensive and General Education requirements for a baccalaureate degree.

Associate of Science (AS) Degree – The courses listed above may be included in the AS degree. The degree does NOT guarantee that students will be accepted as having completed all lower division comprehensive and General Education requirements for a baccalaureate degree. Student should work with an Academic Advisor to plan for transfer to the school and major of their choice.

Transfer without a PCC Degree – Students may elect to earn credits and transfer to a four-year institution without earning a PCC degree. Please meet with an Academic Advisor for an individualized plan of study.

PCC endeavors to create accurate transfer guides for students; however, requirements may change without notice. Students are responsible for working with PCC advisors and their transfer institution to ensure that their academic plan will meet requirements and timelines.

Undergraduate Programs

The biology program is designed to prepare students for careers in biological research, development, and teaching, and in health sciences, nursing, agriculture, forestry, and other applied fields. It also provides the necessary background for prospective teachers and for advanced student leading to graduate degrees in the more specialized fields of the biological sciences.

A student planning to enter medicine, dentistry, or other professional fields should consult the catalog of the professional school to which the student intends to apply following pre-professional work in biology and other sciences at Portland State. Biology is also a teaching endorsement area in the program of secondary education.

The Oregon University System maintains the Institute of Marine Biology near Coos Bay and the Hatfield Marine Sciences Center in Newport on the Oregon coast. PSU also participates in programs at the Malheur Field Station in southeastern Oregon. Biology majors are encouraged to spend a summer at one of these institutions.

Degree Requirements

- general University requirements
- general department major requirements
- specific requirements in one of the biology major options

General Requirements

- completion of two terms of statistics or two terms of calculus
- three terms of science majors introductory chemistry with lab
- one term of organic chemistry
- one term 200-level physics
- 12 credits from geology, physics, ore chemistry at the 200-level or higher
- 60 credits in biology including three terms of science majors introductory to biology with lab
- 44 biology credits must be upper division including genetic and fulfillment of the options in PSU catalog
- students must receive a C- grade or better in all upper-division courses specifically listed in the four options

Biology Tracks

Undergraduate Biology students have four tracks that they can follow to complete the major, each specializing in a particular area. Students should make the choice that best suits their academic and professional goals.

General Biology is the track that offers the most flexibility. In addition to the required courses, which will give you a broad overview of the field of Biology, you can use your elective choices to pursue particular avenues of study, such as ecology, evolution, botany, microbiology, and field biology. General Biology is a good option for students planning to go on to graduate study in Biology.

Organismal Biology deals more specifically with the structure and function of physiological systems, particularly in animals. This track is a good choice for students interested in careers in human or veterinary medicine.

Microbiology/Molecular Biology focuses on the ways that plant and animal life function at the microscopic level, including cell activity and biochemical interactions. This track is particularly useful for students going into medicine or pharmacy.

Botany concentrates on the biology of plant life. This track is a good option for students pursuing careers in forestry, plant conservation, or the agricultural sciences.