

Biology

<http://www.pacificu.edu/as/biology>

Advanced Placement:

Students who achieve a score of 4 or 5 on the Advanced Placement exam in Biology will receive four credits toward graduation. However, credit based on the Biology Advanced Placement exam is not equivalent to the General Biology I or II courses (BIOL 202 or 204) at Pacific. Students who plan to major or minor in Biology (or other majors or minors that require General Biology I or II) will need to enroll in these courses at Pacific.

Biology courses for non-science majors (no prerequisites) for 2009-10:

Biol 160: Selected Topics: Humans and Microbes (Fall)
Biol 145 Marine Biology for Non-science Majors (Winter)
Biol 170 Human Genetics (Winter)
Biol 202: General Biology I (Spring)

Students planning on a Biology major:

Students who major in Biology may be planning to attend graduate programs in biological fields, to find employment in the biological sciences, to attend a health care professions graduate program, or to enter a career in teaching. Regardless of their future plans, their first two years will be fairly proscribed with respect to the science classes they choose.

FIRST-YEAR SCHEDULE (PLEASE SEE NOTES FOLLOWING THE SAMPLE SCHEDULE)

Fall

Math 125: Precalculus or 226: Calculus I	4
Chem 220: General Chemistry I	4
Hum 100: First-Year Seminar	4
Core elective	<u>3</u>
Total	15

Winter III Elective 3

Spring

Math 226: Calculus I or 207: Statistics	3-4
Chem 230: General Chemistry II	4
Biol 202: General Biology I	4
Core elective	<u>3</u>
Total	14-15

SECOND-YEAR SCHEDULE

Fall

Biol 204: General Biology II	4
Chem 310/311: Organic Chem. I (or elective if taking Chem 240/241* in spring)	3-4
Math (if not yet completed) or CS 130	2-3
Core elective (Eng 201 recommended)	<u>3</u>
Total	12-14

Winter III Elective 3

Spring

Chem 320/321: Organic Chem II or 240/241: Survey of Organic Chem*	4
Biol 304: Research Methods	3
Electives	<u>6-8</u>
Total	13-15

NOTES:

*Chem 240/241 Survey of Organic Chemistry is offered alternate years only.

Potential Biology majors should be enrolled in Chem 220: General Chemistry I during **the fall of their first year**. Grades of C- or better in Chem 220 **and** Math 125 Precalculus are prerequisites for Chem 230 General Chemistry II in the spring term.

Grades of C- or better in Chem 220, Chem 230, **and** Biol 202 General Biology I are prerequisites for Biol 204 General Biology II. Therefore, students planning to take Biol

204 in **the fall of their sophomore year MUST** take Chem 220 in **the fall of their first year** and Chem 230 in the **spring of their first year**.

******Students who do not meet the prerequisite for Chem 230 and, therefore, cannot complete two semesters of General Chemistry their first year should be advised that it might be difficult to complete a Biology major in four years. **Students in this situation might consider taking a full year of General Chemistry for science majors during the summer between their freshman and sophomore years.** ******

Students planning on a Biology minor:

Students interested in a minor in Biology must complete Math 125 or 226, Chem 220, Chem 230, Biol 202, Biol 204 plus three additional upper-division courses in Biology (excluding Biol 304, 385, 490 and Biol 495). At least one of the upper division courses must be lab based.

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