

REQUIREMENTS FOR THE BIOLOGY MAJOR

Please consult <http://biology.uoregon.edu/advising/> or the Biology Advising Center in 65 Klamath (541-346-4525) for most current information. Course offerings noted Fall (F), Winter (W), Spring (S), Summer (U) are tentative.

RESIDENCY & GRADE REQUIREMENTS: 24 credit hours of Biology applied to the Major must be taken at the University of Oregon. All Biology (BI prefix) courses used to meet the Major requirements must be passed with a C-, P or better.

CHEMISTRY, MATH & PHYSICS: (C-, P, or better grades required effective Fall 2015.)

General Chemistry	CH 221, 222, 223 or 224H, 225H, 226H	12 cr - F, W, S, (U 221, 222, 223)
General Chemistry Lab	CH 227, 228, 229 or 237, 238, 239	6 cr - F, W, S, (U 227, 228, 229)
Organic Chemistry	CH 331 and 335 or 336	8 cr - F, W, S, (U 331, 335, 336)
Calculus for Biological Sci or Calculus	MATH 246, 247 or MATH 251,252	8 cr - F, W, S
General or Foundations of Physics	PHYS 201, 202, 203 or 251, 252, 253	12 cr - F, W, S, (U 201, 202, 203)

LOWER DIVISION BIOLOGY:

Option A. Biology Honors Sequence . Enrollment requires B- or better in CH 223 (or CH 226H) and MATH 111 or higher.

Option B. General Biology Sequence. Enrollment requires C- or better in college-level chemistry lecture course (CH 111, 113, 114, 221 or 224H).

BI 281H Cells, Biochemistry & Physiology	5 cr	BI 211 Cells	4 cr
BI 282H Genetics & Molecular Biology	5 cr	BI 212 Organisms	4 cr
BI 283H Evolution, Diversity & Ecology	5 cr	BI 213 Populations	4 cr
		BI 214 Mechanisms	4 cr

UPPER DIVISION BIOLOGY: Complete a minimum of 44 upper division Biology credits including 1, 2, and 3 below:

1. At least one course completed from Areas I, II, and III.

Area I: Cellular/Molecular

BI 320 Molecular Genetics	4 cr
BI 322 Cell Biology (Main & OIMB)	4 cr
BI 328 Developmental Biology	4 cr
BI 360 Neurobiology	4 cr

Area II: Systems/Organisms

BI 330 & 331 Microbiology & Lab	6 cr
BI 353 Sensory Physiology	4 cr
BI 355 Vertebrate Evolution & Development	4 cr
BI 356 Animal Physiology	5 cr
BI 358 Investigations in Medical Physiology	4 cr
BI 359 Plant Biology	4 cr
BI 399 Auditory System	4 cr
BI 399 Visual System	4 cr
BI 451 Invertebrate Biology/Zoology (OIMB only)	8 cr

Area III: Ecology/Evolution

BI 357 Marine Biology	4 cr
BI 370 Ecology	4 cr
BI 372 Field Biology	4 cr
BI 374 Conservation Biology	4 cr
BI 375 Biological Diversity	4 cr
BI 380 Evolution	4 cr
BI 390 Animal Behavior (Main & OIMB)	4 cr

2. At least two courses at the 300 or 400 level with a major laboratory or field component

Approved lab/field courses: BI 306, 307, 328, 330 & 331, 355, 356, 357, 370, 372, 401*, 410 Mar Micro: Phytoplankton, 410 Matlab for Biologists, 410 Intro Prog Biol., 421, 425, 432, 442, 448, 451, 452, 454, 455, 457, 458, 459, 468, 473, 474, 485, OXLA 488: BI Ecuador Field Study. This requirement may be fulfilled while completing other Biology Major requirements. Course details in the UO catalog. *Two terms of BI 401 in the same laboratory equivalent to one lab/field course.

3. At least 12 credits with a BI prefix numbered 420 to 499. This includes BI 410 experimental courses.

For details about individual courses, please consult the Biology Advising Center, 65 Klamath Hall or call 541-346-4525.

ADDITIONAL COURSES THAT MEET THE 44-CREDIT UPPER DIVISION REQUIREMENT:

1. Research, Teaching & Workshops with credit limitations:

BI 401 Research or BI 402 Supervised College Teaching: A maximum of 4 credits of BI 401 Research and a maximum of 4 credits of BI 402 Supervised College Teaching may be applied to the 44-credit upper division Biology requirement. Faculty sponsorship is required.

BI 408 OIMB Summer Workshops: A maximum of 4 credits of BI 408 OIMB Summer Workshops may be applied to the 44-credit upper division Biology requirement.

2. Courses approved for use from other departments: A maximum of 10 credits may be applied toward the 44-credit upper division Biology requirement. These courses cannot be substituted for Areas I, II, and III or 420–499 course requirements. R.D. Clark Honors College, HC 400-level science colloquia taught by Biology faculty may also be approved as outside department courses. For details about individual courses, please consult the Biology Advising Center, 65 Klamath Hall or call 541-346-4525. For all approved courses, the 10-credit maximum still applies.

<u>ANTH</u>	<u>CIS</u>	<u>CHEM</u>	<u>ENVS</u>	<u>GEOG</u>	<u>GEOL</u>	<u>HPHY</u>	<u>LA</u>	<u>PSY</u>	<u>STATS</u>
376 467	445	360 467	375	323	431	321	441	438	ANTH 470
459 468	454	461	465	421	432	322		445	GEOL 418
460 470	471	462	477	423	433	323		449	MATH 425
462 472		463			434	324			PSY 302
463 487									

ADDITIONAL LIMITATIONS & ALLOWANCES WITHIN THE 44-CREDIT UPPER DIVISION REQUIREMENT:

- ❖ BI 357 Marine Biology may not be taken for credit after credit is received for either BI 458 Biological Oceanography or BI 474 Marine Ecology.
- ❖ BI 403 Thesis, BI 405 Reading, BI 406 Field Studies, BI 407 Seminar, BI 408 Laboratory Projects, BI 409 Practicum may be applied toward the University of Oregon's 62-credit upper division requirement, but cannot be applied toward the Biology major 44-credit upper division requirement.