Bachelor of Science in Biology—Biological Sciences Emphasis

Curriculum

Required courses and recommended terms during which they should be taken:

Freshman Year	**Fall**	
BIO 211	Principles of Biology	4
MATH 111	College Algebra	4
WRI 121	English Composition	3
	Social Science elective	3
Total		**14**

Freshman Year	**Winter**	
BIO 212	Principles of Biology	4
GEOG 105	Physical Geography: Geomorphology	3
MATH 112	Trigonometry	4
WRI 122	English Composition	3
Total		**14**

Freshman Year	**Spring**	
BIO 213	Principles of Biology	4
MATH 361	Statistical Methods I ***	4
SPE 111	Fundamentals of Speech	3
WRI 227	Technical Report Writing	3
Total		**14**

Sophomore Year	**Fall**	
BIO 345	Medical Microbiology	5
CHE 221	General Chemistry	5
MATH 251	Differential Calculus	4
	Social Science elective	3
Total		**17**

Sophomore Year	**Winter**	
BIO 341	Medical Genetics	3
CHE 222	General Chemistry	5
MATH 252	Integral Calculus	4
SPE 321	Small Group and Team Communication	3
Total		**15**

Sophomore Year	**Spring**	
BIO 313	Botany ‡	4
CHE 223	General Chemistry	5
WRI 327	Advanced Technical Writing	3
	Humanities elective	3
Total		**15**

Junior Year	**Fall**	
BIO 351	Vertebrate Biology ‡‡	4
CHE 331	Organic Chemistry I	4
PHY 221	General Physics with Calculus *	4
	Humanities elective	3
Total		**15**

Junior Year	**Winter**	
ANTH 101	Introduction to Physical Anthropology §	3
BIO 352	Developmental Biology ‡‡	4
CHE 332	Organic Chemistry II	4
PHY 222	General Physics with Calculus *	4
Total		**15**

Junior Year	**Spring**	
BIO 317	Invertebrate Biology ‡‡	4
BIO 327	General Ecology ‡	4
CHE 333	Organic Chemistry III	4
PHY 223	General Physics with Calculus *	4
Total		**16**

Senior Year	**Fall**	
BIO 426	Evolutionary Biology	3
CHE 450	Biochemistry I	4
	Elective	3
	Elective	3
	Elective	3
Total		**16**

Senior Year	**Winter**	
CHE 451	Biochemistry II	4
	Humanities elective	3
	Social Science elective	3
	Elective	3
	Elective	3
Total		**16**

Senior Year	**Spring**	
BIO 342	Cell Biology	4
BIO 407	Biology Seminar	2
CHE 452	Biochemistry III	4
	Elective	3
Total		**13**

* PHY 201, PHY 202, PHY 203 may be substituted with advisor consent.

** MATH 243 may be substituted with advisor consent.

§ Another social science course may be substituted with advisor consent.

‡ Offered in alternating years.

‡‡ Offered in alternating years, please see course schedule for each term.

When choosing the major electives or substituting courses, students are responsible for completing a minimum of 60 credits of upper-division work before a degree will be awarded. Upper-division work is defined as 300 and 400 level classes at a bachelor's degree granting institution.

General and Major Elective Choices:

BIO 112	Introduction to Data Analysis	1
BIO 205	Nutrition	3
BIO 216	Introduction to Veterinary Medicine	4
BIO 225	Riparian Assessment Methods	1
BIO 226	Introduction to Wildlife Rehabilitation	3
BIO 227	Introduction to Forensic Science	4
BIO 231	Human Anatomy and Physiology I ◊	4
BIO 232	Human Anatomy and Physiology II ◊	4
BIO 233	Human Anatomy andPhysiology III ◊	4
BIO 331	Human Anatomy and Physiology I ◊	5
BIO 332	Human Anatomy and Physiology II ◊	5
BIO 333	Human Anatomy and Physiology III ◊	5
BIO 337	Aquatic Ecology °‡	4
BIO 346	Pathophysiology I	3
BIO 347	Pathophysiology II	3
BIO 357	Introduction to Neuroscience	3
BIO 428	Animal Behavior °	3
BIO 434	Data Analysis Methods	4
BIO 436	Immunology	4
BIO 471	Senior Project Proposal Research	1
BIO 472	Senior Project Proposal	1
BIO 473	Senior Project Data Collection	3
BIO 474	Senior Project Data Analysis and Presentation	2
CHE 235	Streamwater Chemistry and Sampling	3
CHE 315	Environmental Chemistry and Toxicology	3
CHE 325	Soil Science	4
CHE 360	Clinical Pharmacology for the Health Professions	3
GEOG 115	Physical Geography: Climatology	4
GIS 105	Map and Compass/GIS	1
MATH 362	Statistical Methods II	4

Other Major Electives with advisor approval.

◊ Students wishing to use Human Anatomy and Physiology should select either the 231-233 or 331-333 sequence. Note credit hour differences and consult with advisor.

° Either BIO 337 or BIO 428 is required for admission to Southern Oregon University's MAT program.