

Bachelor of Science - Concentration in Ecology

Note: All **BIOL** & **PHYS** prerequisites must be passed with a **C- or better**, unless stated otherwise. All **CHEM** & **MATH** prerequisites must be passed with a **C or better**, unless stated otherwise.

Requirement	if taken	Course		Units	Prerequisites by ID
		ID	Title		
Division Courses					
<i>Courses may be transferable from community college; check ASSIST.org for more information</i>					
All Required		BIOL 230	Introductory Biology 1	5	None
		BIOL 240	Introductory Biology 2	5	BIOL 230
		CHEM 115	General Chemistry 1 + Lab	5	see bulletin: http://bulletin.sfsu.edu/courses/chem/
		CHEM 130	General Organic Chemistry	3	CHEM 115
CHOOSE 16-17 UNITS		CHEM 215/216	General Chemistry 2 + Lab	3/2	CHEM 115, CHEM 215 (concurrent OK for lab)
		PHYS 111/112	General Physics 1 + Lab	3/1	MATH 198 or MATH 199
		PHYS 121/122	General Physics 2 + Lab	3/1	PHYS 111, PHYS 112
		MATH 226	Calculus 1	4	see bulletin: http://bulletin.sfsu.edu/courses/math/
		MATH 227	Calculus 2	4	MATH 226

Total Units for Lower Division

Division Courses					
<i>Courses do not need to be taken in order, only requirement is taking the prerequisites</i>					
All Required		BIOL 337	Evolution	3	BIOL 230, BIOL 240, BIOL 355
		BIOL 355	Genetics	3	BIOL 230, BIOL 240, CHEM 115 (C- or better)
		BIOL 458	Biometry	4	One college-level Biology course
CHOOSE 1 ONLY		BIOL 525	Plant Physiology	3	GE A2, BIOL 230, BIOL 240
		BIOL 630	Animal Physiology	3	BIOL 230, BIOL 240, (CHEM 130 - OR- CHEM 233)
CHOOSE 6-8 UNITS		BIOL 482	Ecology	4	BIOL 230, BIOL 240
		BIOL 490	Ecology of Infectious Disease	4	BIOL 230, BIOL 240
		BIOL 529GW	Plant Ecology	4	GE A2, BIOL 230, BIOL 240
		BIOL 530	Conservation Biology	4	BIOL 230, BIOL 240
		BIOL 532	Restoration Ecology	5	BIOL 230, BIOL 240
		BIOL 534	Wetland Ecology	4	BIOL 230, BIOL 240
		BIOL 577	Ecological and Environmental Modeling	4	BIOL 230, BIOL 240
		BIOL 580	Limnology	3	BIOL 230, BIOL 240, CHEM 215, CHEM 216
		BIOL 582	Biological Oceanography	4	BIOL 230, BIOL 240
		BIOL 585	Marine Ecology	3	BIOL 230, BIOL 240
	BIOL 586	Marine Ecology Lab	2	BIOL 230, BIOL 240	

Division Electives
Select units not used in fulfilling the requirements listed above. Only one of the following courses can be included among those selected: BIOL 317, Biol 322, BIOL 327, BIOL 330, and BIOL 349. Biology 699 can be used for no more than 6 units of the elective requirement.

11-14 Additional Units					
Substitutions, if any					

Total Units for Upper Division
Total Units Needed for Degree

Notes:

At times, CHEM 130 can be substituted with the CHEM 233/335 series. Ask your advisor for more information.