

Iowa State University 2018-2019
Double majors in BIOLOGY & ENVIRONMENTAL SCIENCE (CALs)

Semester 1	FRESHMAN YEAR		Semester 2
Critical Thinking & Comm. - Engl 150	3	Exploration of Env. Sci. - EnSci 203 ²	1
Principles of Biology I - Biol 211	3	Library Instruction - Lib 160	1
Principles of Biology Lab - Biol 211L	1	Principles of Biology II - Biol 212	3
General Chemistry - Chem 177	4	Principles of Biology Lab II - Biol 212L	1
General Chemistry Lab - Chem 177L	1	Physical or Life Science choice	3
Orientation – EnSci or Biol 110 ²	1	Calculus - Math 160, 165, or 181	4
Environmental Issues – EnSci 201 ²	2	Social Science or Humanities Choice ¹	3
Env. & Sustain. Issues – EnSci 202 ²	1		
	<hr/> 16		<hr/> 16

Semester 3	SOPHOMORE YEAR		Semester 4
Composition - Engl 250	3	Physics for the Life Sciences – Phys 115	4
Environmental Geography – EnSci 250 ²	3	Communication (Speech)	3
Statistics – Stat 101 or 104	3	Principles of Genetics – Biol 313	3
Organic Chemistry – Chem 231 or 331	3	Genetics Lab – Biol 313L	1
Organic Chemistry Lab – 231L or 331L	1	Biochemistry Course	3
Social Science or Humanities Choice ¹	3		
	<hr/> 16		<hr/> 14

**Summer: Consider field experience such as an internship or field station courses.*

Semester 5	JUNIOR YEAR		Semester 6
Environmental Systems I – EnSci 381 ²	3	Environmental Systems II – EnSci 382 ²	3
Ecology – Biol/EnSci 312 ²	3	Cell Biol. & Biochem. – Biol 314	3
Biol/EnSci Combo Choice ^{2,3}	3	Introduction to Ecosystems - EnSci 384 ²	3
Environmental Science Choice ²	3	Biology Choice	3
Social Science or Humanities Choice ¹	3	Elective	3
	<hr/> 15		<hr/> 15

**Summer: Consider field experience such as an internship or field station courses.*

Semester 7	SENIOR YEAR		Semester 8
Biological Evolution – Biol 315	3	Biol/EnSci Combo Choice ^{2,3}	3
Social Science and Humanities Choice ¹	3	Social Science and Humanities Choice ¹	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
	<hr/> 15		<hr/> 15

Students double majoring in Biology and Environmental Science have the Physics 112 requirement waived.
 Minimum of 120 total credits required.

- 1 Students complete at least 15 credits in humanities and social science including at least 3 credits each in ethics, humanities, social science, U.S. Diversity, and International Perspectives from approved lists.
- 2 Students complete at least 32 credits in Environmental Science including EnSci 110 or Biol 110, and EnSci 201, 202, 203, 250, 381, 382, 384 and 12 additional credits of approved EnSci coursework.
- 3 Students can complete requirements in both majors' choice group by selecting 9 credits from EnSci 301, [370](#), 407, 459, 485, 486, 486L, or 487.