

B.S. DEGREE in PHYSICS+

with Biological Physics Emphasis

Iowa State University

Semester 1	Freshman Year	Semester 2	
Critical Thinking and Comm. - Engl 150	3	Intro to Class. Physics II – Phys 242	5
Introductory Seminar - Phys 199	R	Calculus III - Math 265	4
Intro to Classical Physics I – Phys 241	5	Social Science Choice	3
Calculus II – Math 166	4	General Chemistry I Chem 177+177L ¹	5
Arts&Humanities + IP prespective*	3		17
Library Instruction – Lib 160	1		
	<u>16</u>		

Semester 1	Sophomore Year	Semester 2	
WOVE Composition - Engl 250	3	Classical Mechanics - Phys 361	3
Intro to Modern Physics I – Phys 321	3	Introduction to Partial Differential	
Intro Lab in Mod Phys I - Phys 321L	1	Equations - Math 385	3
Elementary Differential Equations and		Principles of Biology II - BIOL 212	3
Laplace Transforms – Math 267	4	Principles of Biology Lab II - BIOL 212L	1
General Chemistry II Chem 178+178L ¹	5	Social Science Choice	3
	<u>16</u>	Humanities Choice	3
			<u>16</u>

Semester 1	Junior Year	Semester 2	
Organic Chemistry I Chem 331+331L	4	Thermal Physics – Phys 304	3
Electricity and Magnet. I - Phys 364	3	Organic Chemistry II Chem 332 + 332L	4
English Proficiency Requirement - Engl 302, 305, 309 or 314	3	Social Science Choice	3
Matrix/Lin. Algebra – Math 207/317	3(4)	Foreign Language (or Elective)	4(3)
Foreign Language (or Elective)	4(3)		<u>14(13)</u>
	<u>18</u>		

Semester 1	Senior Year	Semester 2	
Principles of Molecular Cell		Molecular Biophysics	
Biology - BIOL 314	3	BBMB 461 ²	2
Humanities Choice	3	Humanities choice	3
Quantum Mechanics – Phys 480	3	Electives	9
Elective	3		<u>14</u>
Biochemistry I - BBMB 404 ²	3		
	<u>15</u>		

* Students should choose a course that satisfy both Arts& Humanities and International Prospective requirements

¹ Chem 177, Chem 117L, Chem 178 and Chem 178L can be used as Natural Science Electives

² Students must earn a minimum of 5 credits in 400 level courses from Phys 432, Phys461 or BBMB404 BBMB411 BBMB461

Students in all ISU majors must complete a three-credit course in U.S. diversity, a three-credit course in international perspectives, 9 credits in Social Science, 8 credits in Natural Science and 12 credits in Arts and Humanities courses.

LAS majors require a minimum of 120 credits, including a minimum of 45 credits at the 300/400 level. You must also complete the LAS foreign language requirement.