

Arkansas State University - Jonesboro
Bachelor of Science
Major: Biological Sciences – Biology Emphasis
2013-2014

Students requiring developmental course work based on low entrance exam scores (ACT, SAT, ASSET, COMPASS) may not be able to complete this program of study in eight (8) semesters. Developmental courses do not count toward total degree hours. **Students having completed college level courses prior to enrollment will be assisted by their advisor in making appropriate substitutions. In most cases, general education courses may be interchanged between semesters.** A minimum of 45 hours of upper division credit (3000-4000 level) is required for this degree. Mandatory state and institutional assessment exams will be required during your degree program. ***Failure to participate in required assessments may delay graduation.***

Year 1				Year 1			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIO 1013	Biology Making Connections	3		BIO 1503	Biology of Plants	3	
BIO 1303	Biology of Animals	3		BIO 1501	Biology of Plants Lab	1	
BIO 1301	Biology of Animals Lab	1		CHEM 1013	General Chemistry I	3	X
ENG 1003	Composition I	3	X	CHEM 1011	General Chemistry I Lab	1	X
MATH 1054	Precalculus	4		ENG 1013	Composition II	3	X
				MATH 2194	Survey of Calculus	4	
Total Hours		14		Total Hours		15	
Year 2				Year 2			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIO 2013	Biology of the Cell	3	X	BIO 3023	Principles of Ecology	3	
BIO 2011	Biology of the Cell Lab	1	X	CHEM 3103	Organic Chemistry I	3	
CHEM 1023	General Chemistry II	3		CHEM 3101	Organic Chemistry I Lab	1	
CHEM 1021	General Chemistry II Lab	1		PHYS 2064	General Physics II	4	
PHYS 2054	General Physics I	4			Social Science	3	X
	Social Science	3	X	STAT 3233	Applied Statistics I	3	
Total Hours		15		Total Hours		17	
Year 3				Year 3			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIO 3013	Genetics	3		BIO 3033	Evolution	3	
BIO 3011	Genetics Lab	1		BIO 3323	Animal Physiology	3	
BIO 3322	Invertebrate Zoology	4		BIO 3321	Animal Physiology Lab	4	

BIO 3332	Invertebrate Zoology Lab				OR		
	OR				Bio 4513	Plant Physiology	
BIO 3303	General Entomology				BIO 4133	Cell Biology	3
BIO 3301	General Entomology Lab				BIO 4131	Cell Biology Lab	OR
CHEM 3113	Organic Chemistry II	3				OR	4
CHEM 3111	Organic Chemistry II Lab	1			CHEM 4243	Biochemistry	
	Fine Arts	3	X			Humanities	3
					COMS 1203	Oral Communication	3
Total Hours		15			Total Hours		15
Year 4				Year 4			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed		Course No.	Course Name	Hrs
							Gen Ed
BIO 3302	Comparative Anatomy	2			BIO 4332	Animal Histology	4
BIO 3312	Comparative Anatomy Lab	2			BIO 4342	Animal Histology Lab	
BIO 4021	Biological Seminar	1				OR	
BIO 4104	Microbiology	4			BIO 4343	Animal Embryology	
BIO 4542	Mycology	3			BIO 4341	Animal Embryology Lab	
BIO 4541	Mycology Lab				BIO 4704	Plant Systematics	3
	OR					OR	OR
BIO 4552	Medical Mycology				BIO 4522	Wetland Plant Ecology	4
BIO 4551	Medical Mycology Lab				BIO 4531	Wetland Plant Ecology Lab	
	US History (to or since 1876) or American Government	3	X			Electives of Your Choice	6
Total Hours		15			Total Hours		14
Total Jr/Sr Hours		51-53			Total Degree Hours		120