

Arkansas State University - Jonesboro
Bachelor of Science
Major: Biotechnology
2023-2024

Students needing developmental course work based on low entrance exam scores (ACT, SAT, ASSET, COMPASS) may require more than eight (8) semesters to complete this program of study. 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.** The following example does not account for the foreign language requirement. Two semesters of a foreign language are required unless taken in high school. This should be discussed with your advisor. If you need to take foreign language courses, choose the lightest semesters.

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 2013	Biology of the Cell	3	X
BIO 1303 + BIO 1301 OR BIO 1503 + BIO 1501	Biology of Animals + Lab OR Biology of Plants + Lab	4	X	BIO 2011	Biology of Cell Lab	1	X
ENG 1003	Composition I	3	X	CHEM 1023	General Chemistry II	3	
CHEM 1013	Chemistry I	4	X	CHEM 1021	General Chemistry II Lab	1	
CHEM 1011	Chemistry I Lab	1	X	ENG 1013	Composition II	3	X
				MATH 2194 OR MATH 2204	Survey of Calculus OR Calculus I	4	X
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 4053	Biosafety and Ethics in Research	3		BIO 3013	Genetics	3	
STAT 3233	Applied Statistics I	3		BIO 3011	Genetics Lab	1	
CHEM 3103	Organic Chemistry I	3		CHEM 3113	Organic Chemistry II	3	
CHEM 1021	Organic Chemistry I Lab	1		CHEM 3111	Organic Chemistry II Lab	1	
PHYS 2054	General Physics I	4	X	PHYS 2064	General Physics II	4	
	Social Science	3	X	BIO 2042	Biotechnology in a Global Society	2	
Total Hours		17		Total Hours		14	

Year 3				Year 3			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIO 4104	Microbiology	4		BIO 4153	Laboratory in Biotechniques I	3	
BIO 4164	Molecular Biology	4		AGRI 4523	Applied Modern Biotechnology	3	
				OR	OR		
				BIO 4213	Human Genetics		
CHEM 4243 + CHEM 4241	Biochemistry + Lab	4		BIO 4033	Bioinformatics and Applications	3	
SCOM 1203	Oral Communication	3	X	BIO 4133	Cell Biology + Lab	4	
				BIO 4131			
					Humanities	3	X
Total Hours		15		Total Hours		16	
Year 4				Year 4			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIO 4163	Laboratory in Biotechniques II	3		MGMT 3123	Principles of Management	3	
				OR	OR		
				MGMT 3183	Entrepreneurship		
BIO 4113 OR BIO 4103	Immunology OR Virology	3		BIO 403V	Special Problems in Biology	2	
	Upper-Level Biology Elective	3			Upper-Level Biology Elective	3	
	US History (to or since 1876) or Intro. American Government	3	X	BIO 4053	Applications in Biotechnology	3	
	Social Science	3	X		Fine Arts Elective	3	X
Total Hours		15		Total Hours		14	
Total Jr/Sr Hours		55		Total Degree Hours		120	