

Degree Title
Arkansas State University - Jonesboro
Bachelor of Science
Major: Wildlife, Fisheries & Conservation—Wildlife Emphasis
2021-2022

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. It is important to note that some upper-level degree requirements may be courses that are only offered once every two years. Students and advisors must become familiar with the cycle of teaching these courses. Students and advisors must also be aware that some courses may be taught only in Fall or Spring semesters. Mandatory state and institutional assessment exams will be required during your degree program. **Failure to participate in required assessments may delay graduation.**

Pre-requisites that dictate the sequence of some courses:

- **CHEM 1011 & CHEM 1013 General Chemistry I and the lab** require **MATH 1023 College Algebra** or an ACT composite ≥ 23 .
- **MATH 1023 College Algebra** requires ACT Math ≥ 21
- **MATH 1054 Precalculus** requires **MATH 1023 College Algebra** or ACT Math ≥ 23 .
- **MATH 2194 Survey of Calculus** requires **MATH 1023 College Algebra** or **MATH 1054 Precalculus** or ACT Math ≥ 26 .
- **MATH 2204 Calculus I** requires **MATH 1023 College Algebra** or **MATH 1054 Precalculus** or ACT ≥ 26 .
- **BIO 4043 Biometry** requires **MATH 1023 College Algebra**.
- **STAT 3233 Applied Statistics I** requires **MATH 1023 College Algebra**.
- **PSSC 2811 & PSSC 2813 Soils and the lab** require **CHEM 1011 & CHEM 1013 General Chemistry I and the lab**.
- **BIO 2011 & BIO 2013 Biology of the Cell and the lab** require **CHEM 1011 & CHEM 1013 General Chemistry I and the lab**.
- **BIO 3011 & BIO 3013 Genetics and the lab** require **BIO 2011 & BIO 2013 Biology of the Cell and the lab**.
- Most botany, aquatic, wildlife, and zoology electives require **BIO 1301 & BIO 1303 Biology of Animals and the lab** and/or **BIO 1501 & BIO 1503 Biology of Plants and the lab**. However, some electives (e.g., BIO 4301 & BIO 4302 Aquatic Entomology and the lab, BIO 4372 Applied Fisheries) have additional pre-requisites.
- **BIO 4651 & BIO 4653 Wildlife Management and the lab** require **BIO 1301 & BIO 1303 Biology of Animals and the lab**.
- **BIO 4661 & BIO 4663 Wildlife Management Investigational Techniques and the lab** require **BIO 1301 & BIO 1303 Biology of Animals and the lab**.
- **BIO 4704 Plant Systematics** requires **BIO 1501 & BIO 1503 Biology of Plants and the lab**.
- **BIO 3023 Principles of Ecology** requires **BIO 1301 & BIO 1303 Biology of Animals and the lab** **and** **BIO 1501 & BIO 1503 Biology of Plants and the lab**.
- **BIO 4371 & BIO 4373 Animal Ecology and the lab** require **BIO 3023 Principles of Ecology**.
- **BIO 4613 Conservation Biology** requires **BIO 3023 Principles of Ecology**.
- **AGST 3543 Fundamentals of GIS and GPS** requires **COMS 1203 Oral Communication**, **ENG 1013 Composition I**, **MATH 1023 College Algebra**, and **BIO 3203 Principles of Ecology**.

The following examples do 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.

If the first semester is an even-year fall semester (e.g., Fall 2020)

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 + BIO 1501	Biology of Plants + Lab	3 + 1		
BIO 1303 + BIO 1301	Biology of Animals + Lab	3 + 1		CHEM 1013 + CHEM 1011	General Chemistry I + Lab	3 + 1	X	
ENG 1003	Composition I	3	X	ENG 1013	Composition II	3	X	
MATH 1054	Precalculus (if ACT Math \geq 24)	3-4	X	MATH 2194	Survey of Calculus	4	X	
	OR							
MATH 1023	College Algebra							
LIR 1021	Introduction to Academic Research Biology OR another course of 1-2 hour	1-2						
Total Hours		15		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 + BIO 2011	Biology of the Cell + Lab	3 + 1	X	BIO 3023	Principles of Ecology	3		
ENG 3063	Writing for STEM (communication elective that goes with BIO 2011)	3		PSSC 2813 + PSSC 2811	Soils + Lab	4		
COMS 1203	Oral Communication	3	X	Choose one the following:				
CHEM 1023 + CHEM 1021	General Chemistry II + Lab	3 + 1		BIO 4312 + BIO 4311	Fisheries Biology + Lab	3-4		
	Social Science #1	3	X	BIO 4402 + BIO 4401	Ichthyology + Lab			
					Zoology elective #1			
					Social Science #2	3	X	
					Fine Arts	3	X	
Total Hours		17		Total Hours		16-17		

Year 3				Year 3				
Fall Semester				Spring Semester				
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed	
	Choose one of the following:	3-4		BIO 4613	Conservation Biology	3		
BIO 4352 + BIO 4351	Mammalogy + Lab				OR			
	Zoology elective #1 or #2			POSC 4533	Environmental Law and Administration			
	Freshwater Mussels			BIO 3013 + BIO 3011	Genetics + Lab	3 + 1		
	Botany elective	3-4		BIO 4663 + BIO 4661	Wildlife Management Techniques + Lab	3 + 1		
BIO 4413	Wildlife Internship	3			Choose one of the following:	3-4		
BIO 3673	Human Dimensions in Wildlife	3		BIO 4453 + BIO 4411	Herpetology + Lab			
	US History (to or since 1876) or American Government	3	X	BIO 4423 + BIO 4421	Ornithology + Lab			
					Zoology elective #1 or #2			
Total Hours		14-16		Total Hours		14-15		
Year 4				Year 4				
Fall Semester				Spring Semester				
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed	
BIO 4373 + BIO 4371	Animal Ecology + Lab	3 + 1		BIO 4021	Biological Seminar	1		
BIO 4653 + BIO 4651	Wildlife Management + Lab	3 + 1		BIO 4704	Plant Systematics	4		
BIO 4043	Biometry	3		AGRI 3543	Fundamentals of GIS/GPS	3		
	OR					Choose two of the following:	7-8	
STAT 3233	Applied Stat I				BIO 4453 + BIO 4411	Herpetology + Lab		
	Humanities	3	X	BIO 4423 + BIO 4421	Ornithology + Lab			
					Zoology elective #2			
Total Hours		14		Total Hours		15-16		
Total Jr/Sr Hours				59	Total Degree Hours			120

If the first semester is an odd-year fall semester (e.g., Fall 2021)

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 + BIO 1501	Biology of Plants + Lab	3 + 1		
BIO 1303 + BIO 1301	Biology of Animals + Lab	3 + 1		CHEM 1013 + CHEM 1011	General Chemistry I + Lab	3 + 1	X	
ENG 1003	Composition I	3	X	ENG 1013	Composition II	3	X	
MATH 1054	Precalculus (if ACT Math \geq 24)	3-4	X	MATH 2194	Survey of Calculus	4	X	
	OR							
MATH 1023	College Algebra							
LIR 1021	Introduction to Academic Research Biology OR another course of 1-2 hour	1-2						
Total Hours		15		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 + BIO 2011	Biology of the Cell + Lab	3 + 1	X	BIO 3023	Principles of Ecology	3		
ENG 3063	Writing for STEM (communication elective that goes with BIO 2011)	3		PSSC 2813 + PSSC 2811	Soils + Lab	4		
COMS 1203	Oral Communication	3	X	Choose one the following:				
CHEM 1023 + CHEM 1021	General Chemistry II + Lab	3 + 1		BIO 4353 + BIO 4411	Herpetology + Lab	3-4		
	Social Science #1	3	X	BIO 4423 + BIO 4421	Ornithology + Lab			
					Zoology elective #1			
					Social Science #2	3	X	
					Fine Arts	3	X	
Total Hours		17		Total Hours		16-17		

Year 3				Year 3			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIO 4043	Biometry	3		BIO 4613	Conservation Biology	3	
	OR				OR		
STAT 3233	Applied Stat I				POSC 4533		Environmental Law and Administration
BIO 4373 + BIO 4371	Animal Ecology + Lab	3 + 1		BIO 3013 + BIO 3011	Genetics + Lab	3 + 1	
BIO 4413	Wildlife Internship	3		BIO 4663 + BIO 4661	Wildlife Management Techniques + Lab	3 + 1	
BIO 3673	Human Dimensions in Wildlife	3			Choose one of the following:	3-4	
	US History (to or since 1876) or American Government	3	X	BIO 4312 + BIO 4311	Fisheries Biology + Lab		
				BIO 4402 + BIO 4401	Ichthyology + Lab		
					Zoology elective #1 or #2		
Total Hours		16		Total Hours		14-15	
Year 4				Year 4			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIO 4653 + BIO 4651	Wildlife Management + Lab	3 + 1		BIO 4021	Biological Seminar	1	
	Botany elective	3-4		BIO 4704	Plant Systematics	4	
	Choose two of the following:	6-8		AGRI 3543	Fundamentals of GIS/GPS	3	
BIO 4352 + BIO 4351	Mammalogy + Lab				Choose one or two of the following*:	3-8	
	Freshwater Mussels			BIO 4453 + BIO 4411	Herpetology + Lab		
	Zoology elective #1 or #2			BIO 4423 + BIO 4421	Ornithology + Lab		
	Humanities	3	X		Zoology elective #2		
Total Hours		16-18		Total Hours		11-16	
Total Jr/Sr Hours			59	Total Degree Hours			120

*Depending on the scenario, they may only need one option in that last semester for only ~11 hrs, which is not ideal:

Scenario	Spring of Year 2	Spring of Year 3	Fall of Year 4	Spring of Year 4	Total
1	Herpetology or Ornithology Total hrs: 17	Ichthyology or Fisheries Biology Total hrs: 14	Mammalogy + Zoology elective 1 Total hrs: 16-18	Zoology elective 2 Total hrs: 11-12	58-61
2	Herpetology or Ornithology Total hrs: 17	Ichthyology or Fisheries Biology Total hrs: 14	Fresh. Mussel as zoo elective 1 + Zoo elective 2 Total hrs: 16-18	Herpetology or Ornithology Total hrs: 12	59-61
3	Herpetology or Ornithology Total hrs: 17	Zoology elective 1 Total hrs: 14-15	Mammalogy + Fresh. Mussel Total hrs: 16-17	Zoology elective 2 Total hrs: 11-12	58-61
4	Herpetology or Ornithology Total hrs: 17	Zoology elective 1 Total hrs: 14-15	Fresh. Mussel + Zoology elective 2 Total hrs: 16-18	Herpetology or Ornithology Total hrs: 12	59-62

5	Herpetology or Ornithology Total hrs: 17	Zoology elective 1 Total hrs: 14-15	Mammalogy + Zoology elective 2 Total hrs: 16-17	Let's hope there is an aquatic elective.**	
6	Zoology elective 1 Total hrs: 16-17	Ichthyology or Fisheries Biology Total hrs: 14	Mammalogy + Zoology elective 2 Total hrs: 16-18	Herpetology or Ornithology Total hrs: 12	58-61
7	Zoology elective 1 Total hrs: 16-17	Ichthyology or Fisheries Biology Total hrs: 14	Zoology elective 2 Total hrs: 12-14	Herpetology + Ornithology Total hrs: 16	58-61
8	Zoology elective 1 Total hrs: 16-17	Zoology elective 2 Total hrs: 14-15	Mammalogy + Fresh. Mussel Total hrs: 16-17	Herpetology or Ornithology Total hrs: 12	58-62

** Odd-year springs general don't have any but maybe Applied Aquaculture or Applied Fisheries