

**AS IN NATURAL SCIENCE TO BS IN BIOLOGICAL SCIENCES  
EMPHASIS IN BIOLOGY**

Campus		Arkansas State University - Newport Courses	Comparable A-State Course	Hours
ASU Newport	English Composition	ENG 1003 Composition I	ENG 1003 Composition I	3
		ENG 1013 Composition II	ENG 1013 Composition II	3
		SPCH 1203 Oral Communication	COMS 1203 Oral Communication	3
	Math	MATH 1023 College Algebra	MATH 1023 College Algebra	3
	Life Science	BIOL 2213/2211 Biological of the Cell/Lab	BIO 2103/2101 Microbiology for Nursing/Lab	4
	Physical Science	CHEM 1013/1011 General Chemistry I/Lab	CHEM 1013/1011 General Chemistry I/Lab	4
	US History/Government	POSC 2103 U.S. Government	POSC 2103 Intro to US Government	3
		HIST 2763 US History to 1876	HIST 2763 The US to 1876	
		HIST 2773 US History since 1876	HIST 2773 The US since 1876	
	World History	HIST 1023 World Civilization since 1660	HIST 1023 World Civ Since 1660	3
		HIST 1013 World Civilization to 1660	HIST 1013 World Civ to 1660	
	Social Science	PSY 2013 Introduction to Psychology	PSY 2013 Introduction to Psychology	3
	Arts and Humanities	ENG 2003 Intro to Literature of the Western World I	ENG 2003 World Lit to 1660	3
		ENG 2013 Intro to Literature of the Western World II	ENG 2013 World Lit since 1660	
		PHIL 1103 Introduction to Philosophy	PHIL 1103 Introduction to Philosophy	3
		MUS 2503 Fine Arts-Music	MUS 2503 Fine Arts Music	
		ART 2503 Fine Arts-Visual	ART 2503 Fine Arts Visual	
		THEA 2503 Fine Arts-Theatre	THEA 2503 Fine Arts Theatre	
	Major Area Requirements	MATH 2204 Calculus I	MATH 2204 Calculus I	4
		GEOL 1003/1001 Environmental Geology/Lab	GEOL 1003/1001 Environmental Geology/Lab	4
		BIOL 1033/1031 Biology of Plants/Lab	BIO 1503/1501 Biology of Plants/Lab	4
		BIOL 1053/1051 Biology of Animals/Lab	BIO 1303/1301 Biology of Animals/Lab	4
		PHYS 2054 General Physics I	PHYS 2054 General Physics I	4
PHYS 2064 General Physics II		PHYS 2064 General Physics II	4	
CHEM 1023/1021 General Chemistry II/Lab		CHEM 1023/1021 General Chemistry II/Lab	4	
A-State	Foreign Language		French, German, or Spanish	0-6
	Major Requirements		BIO 3013/3011 Genetics and Lab	4
			BIO 3023 Principles of Ecology	3
			BIO 4021 Biological Seminar	1
			CHEM 3103/3101 Organic Chemistry I and Lab	4
			CHEM 3113/3111 Organic Chemistry II and Lab	4
		Emphasis Area: Biology		BIO 3303/3301 General Entomology and Lab
			BIO 3322/3332 Invertebrate Zoology and Lab	
			BIO 3033 Evolution	3
			BIO 3302/3312 Comparative Anatomy and Lab	4
			BIO 4443/4441 Comparative Animal Physiology and Lab	3-4
			BIO 4513 Plant Physiology	
			BIO 4104 Microbiology	4
			BIO 4133/4131 Cell Biology and Lab	3-4
			CHEM 4243 Biochemistry	
			BIO 4332/4342 Animal Histology and Lab	4
			BIO 4343/4341 Animal Embryology and Lab	
			BIO 4542/4541 Mycology and Lab	3
			BIO 4552/4551 Medical Mycology and Lab	
			BIO 4704 Plant Systematics	3-4
	BIO 4522/4521 Wetland Plant Ecology and Lab			
	STAT 3233 Applied Statistics I	3		
	Electives (BIO-prefix)	5-8		

**AS IN NATURAL SCIENCE TO BS IN BIOLOGICAL SCIENCES  
EMPHASIS IN BOTANY**

Campus		Arkansas State University - Newport Courses	Comparable A-State Course	Hours
ASU Newport	English Composition	ENG 1003 Composition I	ENG 1003 Composition I	3
		ENG 1013 Composition II	ENG 1013 Composition II	3
		SPCH 1203 Oral Communication	COMS 1203 Oral Communication	3
	Math	MATH 1023 College Algebra	MATH 1023 College Algebra	3
	Life Science	BIOL 2213/2211 Biological of the Cell/Lab	BIO 2103/2101 Microbiology for Nursing/Lab	4
	Physical Science	CHEM 1013/1011 General Chemistry I/Lab	CHEM 1013/1011 General Chemistry I/Lab	4
	US History/Government	POSC 2103 U.S. Government	POSC 2103 Intro to US Government	3
		HIST 2763 US History to 1876	HIST 2763 The US to 1876	
		HIST 2773 US History since 1876	HIST 2773 The US since 1876	
	World History	HIST 1023 World Civilization since 1660	HIST 1023 World Civ Since 1660	3
		HIST 1013 World Civilization to 1660	HIST 1013 World Civ to 1660	
	Social Science	PSY 2013 Introduction to Psychology	PSY 2013 Introduction to Psychology	3
	Arts and Humanities	ENG 2003 Intro to Literature of the Western World I	ENG 2003 World Lit to 1660	3
		ENG 2013 Intro to Literature of the Western World II	ENG 2013 World Lit since 1660	
		PHIL 1103 Introduction to Philosophy	PHIL 1103 Introduction to Philosophy	
		MUS 2503 Fine Arts-Music	MUS 2503 Fine Arts Music	
		ART 2503 Fine Arts-Visual	ART 2503 Fine Arts Visual	
	Major Area Requirements	THEA 2503 Fine Arts-Theatre	THEA 2503 Fine Arts Theatre	4
		MATH 2204 Calculus I	MATH 2204 Calculus I	
		GEOL 1003/1001 Environmental Geology/Lab	GEOL 1003/1001 Environmental Geology/Lab	
BIOL 1033/1031 Biology of Plants/Lab		BIO 1503/1501 Biology of Plants/Lab		
BIOL 1053/1051 Biology of Animals/Lab		BIO 1303/1301 Biology of Animals/Lab		
PHYS 2054 General Physics I		PHYS 2054 General Physics I		
PHYS 2064 General Physics II		PHYS 2064 General Physics II		
CHEM 1023/1021 General Chemistry II/Lab	CHEM 1023/1021 General Chemistry II/Lab	4		
A-State	Foreign Language		French, German, or Spanish	0-6
	Major Requirements		BIO 3013/3011 Genetics and Lab	4
			BIO 3023 Principles of Ecology	3
			BIO 4021 Biological Seminar	1
			CHEM 3103/3101 Organic Chemistry I & Lab	4
			CHEM 3113/3111 Organic Chemistry II & Lab	4
	Emphasis Area: Botany		BIO 3033 Evolution	3
			BIO 3303/3301 General Entomology and Lab	4
			BIO 3313/3311 Economic Entomology and Lab	4
			BIO 3542/3541 Plant Pathology and Lab	
			BIO 3542/3541 Mycology and Lab	
			BIO 4552/4551 Medical Mycology and Lab	4
			BIO 4104 Microbiology	
			BIO 4513 Plant Physiology	3
			BIO 4522/4521 Wetland Plant Ecology and Lab	3
			BIO 4704 Plant Systematics	4
			STAT 3233 Applied Statistics I	3
	CHEM 4243 Biochemistry	8-14		
Electives*			Electives	

\*Must include 2 Upper-Level Hours

Last Modified: 5/27/2020

**AS IN NATURAL SCIENCE TO BS IN BIOLOGICAL SCIENCES  
EMPHASIS IN PRE-PROFESSIONAL STUDIES**

Campus		Arkansas State University - Newport Courses	Comparable A-State Course	Hours
ASU Newport	English Composition	ENG 1003 Composition I	ENG 1003 Composition I	3
		ENG 1013 Composition II	ENG 1013 Composition II	3
		SPCH 1203 Oral Communication	COMS 1203 Oral Communication	3
	Math	MATH 1023 College Algebra	MATH 1023 College Algebra	3
	Life Science	BIOL 2213/2211 Biological of the Cell/Lab	BIO 2103/2101 Microbiology for Nursing/Lab	4
	Physical Science	CHEM 1013/1011 General Chemistry I/Lab	CHEM 1013/1011 General Chemistry I/Lab	4
	US History/Government	POSC 2103 U.S. Government	POSC 2103 Intro to US Government	3
		HIST 2763 US History to 1876	HIST 2763 The US to 1876	
		HIST 2773 US History since 1876	HIST 2773 The US since 1876	
	World History	HIST 1023 World Civilization since 1660	HIST 1023 World Civ Since 1660	3
		HIST 1013 World Civilization to 1660	HIST 1013 World Civ to 1660	
	Social Science	PSY 2013 Introduction to Psychology	PSY 2013 Introduction to Psychology	3
	Arts and Humanities	ENG 2003 Intro to Literature of the Western World I	ENG 2003 World Lit to 1660	3
		ENG 2013 Intro to Literature of the Western World II	ENG 2013 World Lit since 1660	
		PHIL 1103 Introduction to Philosophy	PHIL 1103 Introduction to Philosophy	3
		MUS 2503 Fine Arts-Music	MUS 2503 Fine Arts Music	
		ART 2503 Fine Arts-Visual	ART 2503 Fine Arts Visual	
		THEA 2503 Fine Arts-Theatre	THEA 2503 Fine Arts Theatre	
	Major Area Requirements	MATH 2204 Calculus I	MATH 2204 Calculus I	4
		GEOL 1003/1001 Environmental Geology/Lab	GEOL 1003/1001 Environmental Geology/Lab	4
BIOL 1033/1031 Biology of Plants/Lab		BIO 1503/1501 Biology of Plants/Lab	4	
BIOL 1053/1051 Biology of Animals/Lab		BIO 1303/1301 Biology of Animals/Lab	4	
PHYS 2054 General Physics I		PHYS 2054 General Physics I	4	
PHYS 2064 General Physics II		PHYS 2064 General Physics II	4	
CHEM 1023/1021 General Chemistry II/Lab		CHEM 1023/1021 General Chemistry II/Lab	4	
A-State	Foreign Language		French, German, or Spanish	0-6
	Major Requirements		BIO 3013/3011 Genetics and Lab	4
			BIO 3023 Principles of Ecology	3
			BIO 4021 Biological Seminar	1
			CHEM 3103/3101 Organic Chemistry I and Lab	4
			CHEM 3113/3111 Organic Chemistry II and Lab	4
	Emphasis Area: Pre-Professional Studies		BIO 3302/3312 Comparative Anatomy and Lab <b>AND</b> BIO 3323/3321 Animal Physiology and Lab	8
			BIO 3223/3221 Human Structure and Function I and Lab <b>AND</b> BIO 3233/3231 Human Structure and Function II and Lab	
			BIO 4104 Microbiology	4
			BIO 4133/4131 Cell Biology and Lab	3-4
			CHEM 4243 Biochemistry	9-12
			Please Choose 3 BIO/CHEM/PHIL/STAT Courses from the List in the Bulletin	
	Electives		Electives*	7-17

\*Must include 1-5 Upper-Level Hours

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**AS IN NATURAL SCIENCE TO BS IN BIOLOGICAL SCIENCES  
EMPHASIS IN ZOOLOGY**

Campus		Arkansas State University - Newport Courses	Comparable A-State Course	Hours	
ASU Newport	English Composition	ENG 1003 Composition I	ENG 1003 Composition I	3	
		ENG 1013 Composition II	ENG 1013 Composition II	3	
		SPCH 1203 Oral Communication	COMS 1203 Oral Communication	3	
	Math	MATH 1023 College Algebra	MATH 1023 College Algebra	3	
	Life Science	BIOL 2213/2211 Biological of the Cell/Lab	BIO 2103/2101 Microbiology for Nursing/Lab	4	
	Physical Science	CHEM 1013/1011 General Chemistry I/Lab	CHEM 1013/1011 General Chemistry I/Lab	4	
	US History/Government	POSC 2103 U.S. Government	POSC 2103 Intro to US Government	3	
		HIST 2763 US History to 1876	HIST 2763 The US to 1876		
		HIST 2773 US History since 1876	HIST 2773 The US since 1876		
	World History	HIST 1023 World Civilization since 1660	HIST 1023 World Civ Since 1660	3	
		HIST 1013 World Civilization to 1660	HIST 1013 World Civ to 1660		
	Social Science	PSY 2013 Introduction to Psychology	PSY 2013 Introduction to Psychology	3	
	Arts and Humanities	ENG 2003 Intro to Literature of the Western World I	ENG 2003 World Lit to 1660	3	
		ENG 2013 Intro to Literature of the Western World II	ENG 2013 World Lit since 1660		
		PHIL 1103 Introduction to Philosophy	PHIL 1103 Introduction to Philosophy	3	
		MUS 2503 Fine Arts-Music	MUS 2503 Fine Arts Music		
		ART 2503 Fine Arts-Visual	ART 2503 Fine Arts Visual		
		THEA 2503 Fine Arts-Theatre	THEA 2503 Fine Arts Theatre		
	Major Area Requirements	MATH 2204 Calculus I	MATH 2204 Calculus I	4	
		GEOL 1003/1001 Environmental Geology/Lab	GEOL 1003/1001 Environmental Geology/Lab	4	
		BIOL 1033/1031 Biology of Plants/Lab	BIO 1503/1501 Biology of Plants/Lab	4	
		BIOL 1053/1051 Biology of Animals/Lab	BIO 1303/1301 Biology of Animals/Lab	4	
		PHYS 2054 General Physics I	PHYS 2054 General Physics I	4	
PHYS 2064 General Physics II		PHYS 2064 General Physics II	4		
CHEM 1023/1021 General Chemistry II/Lab		CHEM 1023/1021 General Chemistry II/Lab	4		
A-State	Foreign Language		French, German, or Spanish	0-6	
	Major Requirements		BIO 3013/3011 Genetics and Lab	4	
			BIO 3023 Principles of Ecology	3	
			BIO 4021 Biological Seminar	1	
			CHEM 3103/3101 Organic Chemistry I & Lab	4	
			CHEM 3113/3111 Organic Chemistry II & Lab	4	
		Emphasis Area: Zoology		BIO 3302/3312 Comparative Anatomy and Lab	4
			BIO 3303/3301 General Entomology and Lab	4	
			BIO 3322/3332 Invertebrate Zoology and Lab	4	
			BIO 4443/4441 Comparative Animal Physiology and Lab		
			BIO 4332/4342 Animal Histology and Lab	4	
			BIO 4343/4341 Animal Embryology and Lab	4	
			STAT 3233 Applied Statistics I	3	
			CHEM 4243 Biochemistry	5-7	
			Biology Electives (BIO-Prefix)*		
			<b>Botany Elective (Choose One Option)</b>		2-4
			BIO 3501/3511 Wild Flowers of Arkansas/Lab		
			BIO 3542/3541 Plant Pathology and Lab		
			BIO 3553 Economic Botany		
			BIO 4513 Plant Physiology		
			BIO 4522/4521 Wetland Plant Ecology and Lab		
			BIO 4542/4541 Mycology and Lab		
		BIO 4552/4551 Medical Mycology and Lab			
		BIO 4704 Plant Systematics			
		BIO 4714 Dendrology			
	Electives		Electives	1-11	

\*Must include 2-4 Upper-Level Hours  
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