

# BIOLOGY - BIOMEDICAL OPTION, BACHELOR OF SCIENCE

Dr. Michael Davis, Department Head

McEver Hall, Room 34-D

(479) 964-0816

mdavis@atu.edu

## Curriculum

Course	Title	Hours	Completed
<b>Freshman</b>			
<b>Fall</b>			
BIOL 1011	Orientation to the Biological Sciences	1	_____
BIOL 1114	Principles of Biology	4	_____
CHEM 2124 & CHEM 2120	General Chemistry I and General Chemistry I Lab	4	_____
ENGL 1013	Composition I <sup>1</sup>	3	_____
MATH 1113	College Algebra	3	_____
<b>Hours</b>		<b>15</b>	
<b>Spring</b>			
BIOL 2124	Principles of Zoology	4	_____
CHEM 2134 & CHEM 2120	General Chemistry II and General Chemistry I Lab	4	_____
ENGL 1023	Composition II <sup>1</sup>	3	_____
STAT 2163 or PSY 2053 or SOC 2053	Introduction to Statistical Methods or Statistics for the Behavioral Sciences or Statistics for the Behavioral Sciences	3	_____
USHG 1XXX	U.S. History and Government <sup>1</sup>	3	_____
<b>Hours</b>		<b>17</b>	
<b>Sophomore</b>			
<b>Fall</b>			
BIOL 2134	Principles of Botany	4	_____
CHEM 3254	Fundamentals of Organic Chemistry	4	_____
PHYS 2014 & PHYS 2000	Algebra-Based Physics I and Physics Laboratory I	4	_____
SOC 1003 or PSY 2003	Introductory Sociology or General Psychology	3	_____
<b>Hours</b>		<b>15</b>	
<b>Spring</b>			
BIOL 2014	Human Anatomy	4	_____
CHEM 3264	Mechanistic Organic Chemistry	4	_____
Major Support Elective <sup>3</sup>		3	_____
PHYS 2024 & PHYS 2010	Algebra-Based Physics II and Physics Laboratory II	4	_____
<b>Hours</b>		<b>15</b>	
<b>Junior</b>			
<b>Fall</b>			
BIOL 3034	Genetics	4	_____
BIOL 3054	Microbiology	4	_____
BIOL 3074	Human Physiology	4	_____

SS 1XXX	Social Science Courses <sup>1</sup>	3	_____
<b>Hours</b>		<b>15</b>	
<b>Spring</b>			
BIOL 4033	Cell Biology	3	_____
CHEM 3344	Principles of Biochemistry	4	_____
COMM 2003 or COMM 2173	Public Speaking or Business and Professional Speaking	3	_____
Psychology Elective (3000-4000) <sup>2</sup>		3	
Elective		2	
<b>Hours</b>		<b>15</b>	
<b>Senior</b>			
<b>Fall</b>			
BIOL 3114 or BIOL 4094	Principles of Ecology or Coastal Ecology	4	_____
Biomedical Elective <sup>5</sup>		6-8	
FAH 1XXX	Fine Arts and Humanities Courses <sup>1</sup>	3	_____
Mathematic or Statistics Elective <sup>4</sup>		3	
<b>Hours</b>		<b>16-18</b>	
<b>Spring</b>			
BIOL 4891	Seminar in Biology	1	_____
Biomedical Elective <sup>5</sup>		6-8	
FAH 1XXX	Fine Arts and Humanities Courses <sup>1</sup>	3	_____
Elective		2	
<b>Hours</b>		<b>12-14</b>	
<b>Total Hours</b>		<b>120-124</b>	

<sup>1</sup> See appropriate alternatives or substitutions in "General Education Requirements (<https://catalog.atu.edu/undergraduate/general-education-requirements/>)".

<sup>2</sup> Psychology Elective 3000-4000 level courses include: PSY 3003 Abnormal Psychology, PSY 3013 Psychosocial Aspects of Death and Dying, PSY 3813 Lifespan Development, or PSY 4133 Psychopharmacology.

<sup>3</sup> Major Support Elective courses include: AHS 2013 Medical Terminology, PE 2513 First Aid, or PHIL 3103 Logic.

<sup>4</sup> Mathematics and Statistics Elective courses include: any mathematics higher than MATH 1113 College Algebra or any statistics higher than STAT 2163 Introduction to Statistical Methods.

<sup>5</sup> Biomedical Elective courses include: BIOL 3033 Bioinformatics, BIOL 3064 Parasitology, BIOL 3803 Applied Pathophysiology, BIOL 4023 Immunology, BIOL 4054 Vertebrate Histology, BIOL 4074 Molecular Genetics, BIOL 4881 Advanced Topics in Biology, BIOL 4882 Advanced Topics in Biology, BIOL 4883 Advanced Topics in Biology, BIOL 4884 Advanced Topics in Biology, BIOL 4951 Undergraduate Research in Biology, BIOL 4952 Undergraduate Research in Biology, BIOL 4953 Undergraduate Research in Biology, BIOL 4954 Undergraduate Research in Biology.

<sup>6</sup> At least 40 of the total hours required for graduation must be 3000-4000 level courses.