



**ASSOCIATE OF SCIENCE**  
**BIOLOGY**

2023-24 Catalog

Effective Summer 2023

**1270**

*The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.*

*Arts and Sciences Division*

*Biology Department*

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
<b>FRESHMAN EXPERIENCE</b>				
SSC101	Student Success Seminar^^	1	<i>Take first semester</i>	
<b>ENGLISH COMPOSITION AND ORAL COMMUNICATION: 6 credit hours</b>				
ENG124	College Composition^ ( <b>required</b> )	3	ENG011 <b>or</b> Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ENG231	College Composition II	3	ENG124	
COM121	Effective Speaking	3		
COM122	Interpersonal Communication	3		
<b>SOCIAL AND BEHAVIORAL SCIENCES: 6 credit hours across two disciplines</b>				
PSY121	General Psychology^	3	IDS102 <b>or</b> Proficiency	
SOC121	Sociology^	3	IDS102 <b>or</b> Proficiency	
BUS122	Basic Economics^	3	IDS102 <b>or</b> Proficiency	
SOC225	Diversity in American Society ( <b>required</b> )	3	IDS102 <b>or</b> Proficiency	
<b>ARTS AND HUMANITIES: 6 credit hours across two disciplines</b>				
ENG233	British Literature: Med to 1785	3	ENG124	
ENG234	British Literature: 1785 to Present	3	ENG124	
ENG236	American Literature: Colonial to 1865	3	ENG124	
ENG237	American Literature: 1865 to Present	3	ENG124	
HIS121	U.S. History I to 1877	3		
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
<b>MATHEMATICS, STATISTICS, AND LOGIC: 4 credit hours minimum</b>				
MTH125	College Algebra^	4	MTH023 <b>or</b> Pre-Co-MTH025 <b>or</b> Proficiency	
MTH135	Precalculus^ – <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.</i>	5	MTH025 <b>or</b> Proficiency	
MTH223	Analytic Geometry and Calculus I^*	4	MTH135 <b>or</b> (MTH125 and MTH130) <b>or</b> Proficiency	

^ Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester

\*Required for Ohio Guaranteed Transfer Pathways in biology.

<b>2023-24 Catalog</b> Effective Summer 2023	<h1>BIOLOGY</h1>	<h1>1270</h1>
---	------------------	---------------

<b>NATURAL SCIENCES: 18 credit hours required</b>				
BIO141	General Biology I (lab)	4		
BIO142	General Biology II (lab)▲+	4		
CHM141	General Chemistry I (lab)▲	5	(CHM101 or Proficiency) or (MTH024 or MTH025 or Proficiency)	
CHM142	General Chemistry II (lab)▲+	5	CHM141	
<b>BIOLOGY CORE ELECTIVES: 4-8 credit hours minimum as needed to meet total credit hour requirement</b>				
BIO200	Ecology (lab)▲-	4	BIO141 or BIO142	
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141	
BIO241	General Genetics (lab)▲-	4	BIO141	
BIO242	Cell and Molecular Biology (lab)▲+	4	BIO141	
<b>CAPSTONE</b>				
SCI273	Special Topics in Science	3	<i>Sophomore in program</i>	
<b>CONCENTRATION ELECTIVES: Select additional courses to complete the total of 60 - 63 credit hours</b>				
CHM241	Organic Chemistry I (lab)▲-	5	CHM142	
CHM242	Organic Chemistry II (lab)▲+	5	CHM241	
CHM243	Biochemistry I▲-	3	CHM123 or CHM141	
CHM105	Introduction to Forensic Science (lab)	3		
CHM205	Forensic Chemistry (lab)	4	CHM123 or CHM141 or CHM105	
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
PHY122	College Physics II with Algebra (lab)▲+	4	PHY121	
<b>TOTAL CREDIT HOURS</b> <i>(60 credits minimum)</i>		<b>60-63</b>		

^ Based on SSC placement scores

▲ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

▲- Fall only courses. Please see your academic advisor for availability.

▲+ Spring only courses. Please see your academic advisor for availability.

## FULL-TIME STUDENT ADVISING NOTES

### Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

### Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time students who plan to finish in two years.

### Elective Additional Credit

Self-selection of courses and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit Transferology at <http://www.transferology.com> to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer 36 approved and TAG approved courses.

### Bachelor's Degree

Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer.

<u>First Semester</u>		<u>Credit Hours</u>	<u>Pre- and Co-requisites</u>
SSC101	Student Success Seminar^^	1	<i>Take first semester</i>
BIO141	General Biology I (lab)	4	
CHM141	General Chemistry I^ (lab)▲	5	(CHM101 <b>or</b> Proficiency) <b>or</b> (MTH024 <b>or</b> MTH025 <b>or</b> Proficiency)
<i>Mathematics, Statistics, and Logic Elective</i> <sup>4</sup>		<u>4-5</u>	<i>Check for prerequisite</i>
		<b>14-15</b>	
<u>Second Semester</u>			
BIO142	General Biology II (lab)▲+	4	
CHM142	General Chemistry II (lab)▲+	5	CHM141
ENG124	College Composition^ ( <b>required</b> )	3	ENG011 <b>or</b> Proficiency
<i>Social and Behavioral Science Elective</i> <sup>2</sup>		<u>3</u>	<i>Check for prerequisite</i>
		<b>15</b>	
<u>Summer</u>			
<i>English Composition and Oral Communication Elective</i> <sup>1</sup>		3	<i>Check for prerequisite</i>
<i>Concentration Group Elective</i> <sup>6</sup>		<u>3-5</u>	<i>Check for prerequisite</i>
		<b>6-8</b>	
<u>Third Semester</u>			
<i>Biology Core Elective</i> <sup>5</sup>		4	<i>Check for prerequisite</i>
SOC225	Diversity in American Society ( <b>required</b> )	3	IDS102 <b>or</b> Proficiency
<i>Arts and Humanities Elective</i> <sup>3</sup>		3	<i>Check for prerequisite</i>
<i>Concentration Elective</i> <sup>6</sup>		<u>3-5</u>	<i>Check for prerequisite</i>
		<b>13-15</b>	
<u>Fourth Semester</u>			
SCI273	Special Topics in Science	3	<i>Sophomore in program</i>
<i>Arts and Humanities Elective</i> <sup>3</sup>		3	<i>Check for prerequisite</i>
<i>Biology Core Elective</i> <sup>5</sup> <b>OR</b> <i>Mathematics, Statistics, and Logic Elective</i> <sup>4</sup>		4	<i>Check for prerequisite</i>
<i>Concentration Elective</i> <sup>6</sup>		<u>3-5</u>	<i>Check for prerequisite</i>
		<b>13-15</b>	
<b>TOTAL CREDITS</b>		<b>60-63</b>	

^ Based on SSC placement scores

^^ To promote student success, this course should be taken in the first semester

▲ Because of strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

<sup>1</sup> English Composition and Oral Communication Electives: COM121, COM122, ENG221, ENG231

<sup>2</sup> Social and Behavioral Science Electives: PSY121, SOC121, BUS122

<sup>3</sup> Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

<sup>4</sup> Mathematics, Statistics, and Logic Electives: MTH125 or MTH135 or MTH223

<sup>5</sup> Biology Core Electives: BIO200, BIO221, BIO241, BIO242

<sup>6</sup> Concentration Electives: CHM241, CHM242, CHM243, CHM105, CHM205, MTH124, PHY121 or PHY122

▲+Spring only courses. Please see your academic advisor for availability.