

ASSOCIATE OF SCIENCE

BIOLOGY

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.

2024-25 Catalog

Effective Summer 2024

1270

Arts and Sciences Division

Biology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year				
FRESHMAN EXPERIENCE								
SSC101	Student Success Seminar^^	1	Take first semester					
ENGLISH COMPOSITION AND ORAL COMMUNICATION: 6 credit hours								
ENG124	College Composition [^] (required)	3	Co-ENG024 or Co-ENG011 or Proficiency					
ENG221	Technical Report Writing	3	ENG124					
ENG231	College Composition II	3	ENG124					
COM121	Effective Speaking	3						
COM122	Interpersonal Communication	3						
SOCIAL AND BEHAVIORAL SCIENCES: 6 credit hours across two disciplines								
PSY121	General Psychology^	3	IDS102 or Proficiency					
SOC121	Sociology^	3	IDS102 or Proficiency					
BUS122	Basic Economics^	3	IDS102 or Proficiency					
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency					
ARTS AND HUM	ANITIES: 6 credit hours across two disciplines							
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						
MATHEMATICS	, STATISTICS AND LOGIC: 4 credit hours min	nimum						
MTH125	College Algebra^	4	MTH023 or Pre-Co-MTH025 or Proficiency					
MTH135	Precalculus [^] – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency					
MTH223	Analytic Geometry and Calculus I^*	4	MTH135 or (MTH125 and MTH130) or Proficiency					

^ Based on SSC placement scores

 $^{\wedge\wedge}$ To promote student success, this course should be taken in the first semester.

*Required for Ohio Guaranteed Transfer Pathways in biology.

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	
BIOLOGY COR	RE ELECTIVES: 4-8 credit hours minimum as need	ed to meet	total credit hour requirement	
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	
CAPSTONE: Se	lect a minimum of one course from the following			
SCI271	Special Topics in Science I	1	Sophomore in program	
SCI272	Special Topics in Science II	2	Sophomore in program	
SCI273	Special Topics in Science III	3	Sophomore in program	
CONCENTRAT	ION ELECTIVES: Select additional courses to com	plete the t	otal of 60 - 63 credit hours	
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	
	TOTAL CREDIT HOURS (60 credits minimum)	60-63		

^ 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.

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PART-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 part-time associate degree students who plan to finish in eight semesters.

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> SSC101	Student Success Seminar^^	<u>Credit Hours</u> 1	<u>Pre- and Co-requisites</u> Take first semester
BIO141	General Biology I (lab)	4	~
Mathematics, Statistics, and Logic Elective ⁴		<u>4-5</u>	Check for prerequisite
		9-10	
Second Semester			
BIO142	General Biology II (lab)	4	
ENG124	College Composition [^] (required)	<u>3</u>	Co-ENG024 or Co-ENG011
		_	or Proficiency
T1'10 (7	
<u>Third Semester</u> CHM141	Concernal Chamisters IA (lab)	5	(CUM101 or Professor and or
CHM141	General Chemistry I [∧] (lab) ▲	3	(CHM101 or Proficiency) or (MTH024 or MTH025 or
			Proficiency)
SOC225	Diversity in American Society (required)	<u>3</u>	IDS102 or Proficiency
500225	Diversity in American Society (required)		in BB102 of Tronelency
		8	
<u>Fourth Semester</u> CHM142	Compared Chamisters II (1-1)	5	CHM141
	General Chemistry II (lab) <i>nd Oral Communication Elective</i> ¹	5	
English Composition a	na Orai Communication Elective	<u>3</u> 8	Check for prerequisite
Fifth Semester		0	
Biology Core Elective ⁵	5	4	Check for prerequisite
Social and Behavioral Science Elective ²		3	Check for prerequisite
Social and Denarioral		$\frac{3}{7}$	cheekyor prerequisite
Sixth Semester			
Arts and Humanities Elective ³		3	Check for prerequisite
Concentration Elective ⁶		<u>3-5</u> 6-8	Check for prerequisite
		6-8	
Seventh Semester			
Concentration Group E		3-5	Check for prerequisite
Arts and Humanities El	lective ³	<u>3</u>	Check for prerequisite
		6-8	
Eighth Semester		4	
Concentration Elective	⁵ OR Mathematics, Statistics and Logic Elective ⁴	4	Check for prerequisite
SCI271, SCI272, or	Special Topics in Science I, II, or III	3-5	Check for prerequisite Sophomore in program
SCI271, SCI272, or SCI273	special ropics in Science I, II, or III	<u>1-3</u>	sopnomore in program
501275		10-12	
	TOTAL CREDITS	60-63	

^ 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.

¹ English Composition and Oral Communication Electives: COM121, COM122, ENG221, ENG231
² Social and Behavioral Science Electives: BUS122, PSY121, SOC121,

⁵ Biology Core Electives: BIO200, BIO221, BIO241, BIO242

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

Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Mathematics, Statistics and Logic Electives: MTH125 or MTH135 or MTH223

⁶ Concentration Electives: CHM241, CHM242, CHM243, CHM105, CHM205, MTH124, PHY121 or PHY122