# Stark State

## ASSOCIATE OF SCIENCE

# PRE-MEDICAL PROFESSIONAL CONCENTRATION

# (Pre-Pharmacy, Pre-Medicine, Pre-Dentistry, Pre-Veterinary)

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

**2025-26 Catalog** 

Effective Summer 2025

1280

## Arts and Sciences Division

## Biology Department

Aris una 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					
ENG231	College Composition II	3	ENG124					
COM121	Effective Speaking	3						
COM122	Interpersonal Communication	3						
SOCIAL AND BEHAVIORAL SCIENCES: 6 credit hours across two disciplines								
BUS122	Basic Economics^	3	IDS102 or Proficiency					
PSY121	General Psychology <sup>^</sup>	3	IDS102 or Proficiency					
SOC121	Sociology^	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 (recommended)	3						
MATHEMATICS, STATISTICS, AND LOGIC: 4-5 credit hours								
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. (required)	5	MTH025 or Proficiency					
NATURAL SCIEN	NCES: 13 credit hours (1 lab course required)							
BIO141	General Biology I (lab)	4						
BIO142	General Biology II (lab)	4						
CHM141	General Chemistry I (lab)^▲	5	MTH024 or MTH025 or CHM101 Minimum Grade of C or HS Chemistry 3					
	GENERAL EDUCATION CREDIT TOTAL	36 - 37						

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

A Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry in high school. Students who did not complete chemistry in high school, or who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

**2025-26 Catalog** Effective Summer 2025

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Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year				
CONCENTRATION CORE								
CHM142	General Chemistry II (lab)	5	CHM141					
CHM241	Organic Chemistry I (lab) ▲-	5	CHM142					
CHM242	Organic Chemistry II (lab)▲+	5	CHM241					
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency					
CONCENTRATION ELECTIVES – Select additional courses to complete the total of 60 - 64 credit hours*								
BIO121	Anatomy and Physiology I (lab)	4	HS Biology – 3 <b>or</b> BIO101 grade of C					
BIO122	Anatomy and Physiology II (lab)	4	BIO121 or BIO123					
BIO123	Principles of Human Structure and Function (lab)	5	HS Biology – 3 <b>or</b> BIO101 grade of C					
BIO221	Principles of Microbiology (lab)	4	BIO122 or BIO123 or BIO127 or BIO141					
BIO241	General Genetics (lab)▲-	4	BIO141					
BIO242	Cell & Molecular Biology (lab) ▲+	4	BIO141					
CHM243	Biochemistry I	3	CHM123 or CHM141					
MTH223	Analytic Geometry – Calculus I^	4	MTH135 or (MTH125 and MTH130) or Proficiency					
PHY101	Principles of Physics (lab)^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and IDS102 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					
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					
	TOTAL CREDIT HOURS	60-64						

<sup>^</sup>Based upon SSC placement score

<sup>\*</sup>Please obtain the complete list of entrance requirements for the professional medical school(s) to which you would like to apply and consult your academic advisor to determine what electives

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.
▲+Spring only courses. Please see your academic advisor for availability.

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## **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 on the next page provides the normal scheduling option for full-time associate degree 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 <a href="http://www.transferology.com">http://www.transferology.com</a> 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
BIO141 CHM141	General Biology I (lab) General Chemistry I (lab)^▲	4 5	MTH024 or MTH025 or CHM101 Minimum Grade of C or HS Chemistry 3
Mathematics, Statistics, Logic Elective <sup>4</sup>		4-5 14-15	Check for prerequisite
Second Semester			
BIO142	General Biology II (lab)	4	cm () ()
CHM142 ENG124	General Chemistry II (lab) College Composition (required)	5 3	CHM141 Co-ENG024 or Co-ENG011 or Proficiency
Arts and Humanities Elective	2 3	<u>3</u> 15	Check for prerequisite
Third Semester (Summer)			
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency
Arts and Humanities Elective	e <sup>3</sup>	<u>3</u>	Check for prerequisite
		6	
Fourth Semester			
CHM241	Organic Chemistry I (lab) ▲-	5	CHM142
Concentration Elective <sup>5*</sup>		3-5	Check for prerequisite
English Composition and Or	ral Communication Elective <sup>1</sup>	3 11-13	Check for prerequisite
Fifth Semester		5	
CHM242	Organic Chemistry II (lab)▲+	v	CHM241
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency
Social and Behavioral Science Elective <sup>2</sup>		3	Check for prerequisite
Concentration Elective <sup>5*</sup>		3 - 4 14-15	Check for prerequisite
	TOTAL CREDITS	60-64	

<sup>^</sup>Based upon SSC placement score

<sup>^^</sup>To promote student success, this course should be taken in the first semester

A Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry in high school. Students who did not complete chemistry in high school, or who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

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

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

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

<sup>&</sup>lt;sup>4</sup>Mathematics, Statistics, Logic Electives: MTH125 or MTH135

<sup>&</sup>lt;sup>5</sup>Concentration Electives: BIO121, BIO122, BIO123, BIO221, BIO221, BIO241, BIO242, CHM243, MTH223, PHY101, PHY121, PHY122, SCI271, SCI272, SCI273

<sup>\*</sup> Please obtain the complete list of entrance requirements for the professional medical school(s) to which you would like to apply and consult your academic advisor to determine what electives to take.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.