

ASSOCIATE OF SCIENCE

2025-26 Catalog

Effective Summer 2025

1260

CHEMISTRY

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

Chemistry Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year				
FRESHMAN EXPERIENCE								
SSC101	Student Success Seminar^^	1	Take first semester					
CONCENTRATIO	ON CORE: 20 credit hours	ı						
CHM141	General Chemistry I (lab)	5	MTH024 or MTH025 or CHM101 Minimum Grade of C or HS Chemistry 3					
CHM142	General Chemistry II (lab)	5	CHM141					
CHM241	Organic Chemistry I (lab)▲-	5	CHM142					
CHM242	Organic Chemistry II (lab) ▲+	5	CHM241					
NATURAL SCIEN	NCES: 4 credit hour minimum							
CHM205	Forensic Chemistry (lab) (recommended for Forensic Science)	4	CHM123 or CHM141 or CHM105					
PHY101	Principles of Physics (recommended for AS)	4	[(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107] and (IDS102 or Proficiency)					
PHY121	College Physics I with Algebra (lab)^ (recommended for BA)	4	MTH135 or (MTH125 and MTH130) or Proficiency					
PHY221	General Physics I with Calculus (lab) ▲ - (recommended for BS)	5	Pre-MTH223 and Co-MTH224					
BIO141	General Biology I (lab)**	4						
MATHEMATICS,	STATISTICS AND LOGIC: 5 credit hours min	imum						
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency					
ENGLISH COMP	OSITION AND ORAL COMMUNICATION: 3	credit ho	urs					
ENG124	College Composition^ (required)	3	Co-ENG024 or Co-ENG011 or Proficiency					
SOCIAL AND BE	HAVIORAL SCIENCES: 6 credit hours across	two discipi	lines					
BUS122	Basic Economics^	3	IDS102 or Proficiency					
BUS221	Microeconomics^	3	IDS102 or Proficiency					
BUS222	Macroeconomics^	3	IDS102 or Proficiency					
PSC121	U.S. Government and Politics	3						
PSY121	General Psychology^	3	IDS102 or Proficiency					
PSY124	Industrial/Organizational Psychology	3						
PSY220	Social Psychology	3						
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency					

[^] Based on SSC placement scores

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

^{*}Required if also taking PHY222

^{**}Required if taking BIO241

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

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

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ARTS AND HUMANITIES: 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				
ENG240	Women's Literature	3	ENG124				
HIS121	U.S. History I to 1877	3					
HIS122	U.S. History II from 1877	3					
HIS221	World Civilization to 17th Century	3					
HIS222	World Civilization from 17th Century	3					
PHL122	Ethics	3					
ELECTIVES: Select a	dditional credits from Natural Sciences, Mathematics, or the	e electives ca	tegories to complete the total of 60-65 cre	dit hours			
CHM105	Introduction to Forensic Science (lab)	3					
CHM243	Biochemistry I	3	CHM123 or CHM141				
PHY105	Astronomy (lab)	4					
PHY122	College Physics II with Algebra (lab) ▲*	4	PHY121				
PHY222	General Physics II with Calculus (lab) ▲+	5	Pre-PHY222 and Co-MTH225				
GEO141	Physical Geology (lab)	4					
BIO142	General Biology II (lab)	4					
BIO241	General Genetics (lab)▲-	4	BIO141				
MTH124	Statistics^	3	MTH022 or Pre-Co-MTH024 or Proficiency				
MTH223	Analytic Geometry and Calculus I^	4	MTH135				
MTH224	Analytic Geometry and Calculus II	4	MTH223				
MTH225	Analytic Geometry and Calculus III*	4	MTH224				
MTH227	Ordinary Differential Equations	4	MTH224				
COM121	Effective Speaking	3					
COM122	Interpersonal Communication	3					
CJS121	Introduction to Criminal Justice	3					
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)				
ENG221	Technical Report Writing	3	ENG124				
ENG231	College Composition II	3	ENG124				
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency				
SOC121	Sociology^	3	IDS102 or Proficiency				
SOC122	Society and Technology	3					
SCI271	Special Topics in Science I	1					
SCI272	Special Topics in Science II	2					
SCI273	Special Topics in Science III	3					
SSC201	Study Away: Experiential Learning	1					
TOTAL CREDIT HOURS 60-65							

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^{**}Required if taking BIO241

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

^{▲*}Summer only courses. Please see your academic advisor for availability.

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 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.

First Semester	runsieruomity are controlled by the i	Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
CHM141	General Chemistry I (lab)	5	MTH024 or MTH025 or
	• • •		CHM101 Minimum Grade of C
			or HS Chemistry 3
ENG124	College Composition [^] (required)	<u>3</u>	Co-ENG024 or Co-ENG011
			or Proficiency
		9	
Second Semester			
MTH135	Precalculus	5	MTH025 or Proficiency
CHM142	General Chemistry II (lab)	<u>5</u>	CHM141
		10	
Third Semester			
Elective(s) ⁴		3	Check for prerequisite
SOC225	Diversity in American Society	<u>3</u>	IDS102 or Proficiency
	(required)		
P. 4.0		6	
Fourth Semester Arts and Humanities Elective ²		2	
		3	Check for prerequisite
Social and Behavioral Science Elective ¹		<u>3</u> 6	Check for prerequisite
Fifth Semester		0	
CHM241	Organic Chemistry I (lab)▲-	5	CHM142
Arts and Humanities Elective ²	Organic Chemistry I (180)—-	3	Check for prerequisite
Aris una Humanilles Elective		5 <u>3</u> 8	Check for prerequisite
Sixth Semester		O	
CHM242	Organic Chemistry II (lab) ▲+	5	CHM241
Elective ^{4,5}	Organic Chemistry II (180)		Check for prerequisite
Licetive		3-4 8-9	Check for prerequisite
Seventh Semester		0 /	
Natural Science Elective ³		3-5	Check for prerequisite
Elective(s) 4			Check for prerequisite
		3-4 6-9	r
Eighth Semester			
$Elective(s)^4$		<u>4-7</u>	Check for prerequisite
		<u>4-7</u> 4-7	
	TOTAL CREDITS	60-65	

[^]Based on SSC placement scores

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

¹ Social and Behavioral Science Electives: BUS122, BUS221, BUS222, PSC121, PSY121, PSY124, PSY220, SOC121, SOC122

² Arts and Humanities Electives: ENG233, ENG234, ENG236, ENG237, ENG240, HIS121, HIS122, HIS221, HIS222, PHL122

Natural Science Electives: CHM205, PHY101, PHY121, PHY221, BIO141**

⁴ <u>Electives</u>: CHM105, CHM243, PHY105, PHY122, PHY222, GEO141, BIO142, BIO241, MTH124, MTH223, MTH224, MTH225, MTH227, COM121, COM122, CJS121, CSE122, ENG221, ENG231, ITD122, SOC121, SOC122, SCI271, SCI273, SSC201

⁵ Select additional courses to complete the total of 60-65 credit hours.

^{*}Required if also taking PHY222

^{**} Required if also taking BIO241

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

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