

ASSOCIATE OF SCIENCE

CHEMISTRY

2025-26 Catalog

Effective Summer 2025

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.

1260

	Arts and Sciences Division	Chemistry Department			
Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year	
FRESHMAN EXP	ERIENCE	•	· · ·		
SSC101	Student Success Seminar^^	1	Take first semester		
CONCENTRATIO	ON CORE: 20 credit hours				
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	1			
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	nimum	· · · · ·		
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 discipl	lines		
BUS122	Basic Economics^	3	IDS102 or Proficiency		
BUS221	Microeconomics^	3	IDS102 or Proficiency		
BUS222	Macroeconomics^	3	IDS102 or Proficiency	· 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.

Effective Summer 2025

CHEMISTRY

1260

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 17 th Century	3					
HIS222	World Civilization from 17 th Century	3					
PHL122	Ethics	3					
	lect additional credits from Natural Sciences, Ma	thematics	, or the electives categories to co	mplete the total of			
60-65 credit hour							
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					

^ Based on SSC placement scores

 $^{\wedge\wedge}$ 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.

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

Effective Summer 2025

CHEMISTRY

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 <u>http://www.transferology.com</u> 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
CHM141	General Chemistry I (lab)	5	MTH024 or MTH025 or
			CHM101 Minimum Grade of
		-	C or HS Chemistry 3
MTH135	Precalculus	5	MTH025 or Proficiency
SOC225	Diversity in American Society (required)	3	IDS102 or Proficiency
ENG124	College Composition [^] (required)	<u>3</u>	Co-ENG024 or Co-ENG011
ENG124	Conege Composition (required)	<u>5</u>	or Proficiency
		17	
Second Semester			
CHM142	General Chemistry II (lab)	5	CHM141
Social and Behavioral		3	Check for prerequisite
Arts and Humanities E	lective ²	3	Check for prerequisite
<i>Elective</i> ⁴		3 <u>3</u> 14	Check for prerequisite
		14	
Third Semester		_	
CHM241	Organic Chemistry I (lab)▲-	5	CHM142
Natural Science Electiv	_	3-5	Check for prerequisite
Arts and Humanities E	lective ²	3	Check for prerequisite
<i>Elective</i> ⁴		3-4	Check for prerequisite
		14-17	
Fourth Semester		5	CHM241
CHM242 Elective $(a)^{4,5}$	Organic Chemistry II (lab)▲+	5 4-5	
Elective(s) ^{4,5} Elective(s) ^{4,5}		-	Check for prerequisite
Elective(s)		<u>6-7</u> 15-17	Check for prerequisite
	TOTAL CREDITS	60-65	

^Based on SSC placement scores

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

¹Social 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

³ Natural Science Electives: CHM205, PHY101, PHY121, PHY221, BIO141**

*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.

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, SCI272, SCI273, SSC201 ⁵ Select additional courses to complete the total of 60-65 credit hours.