

**LANSING COMMUNITY COLLEGE**

**Liberal Arts**

**Curriculum Code: 0117**  
(Effective Fall 2018 –  
Summer 2023)

**Chemistry A.S. Pathway**

This degree is designed for students who intend to transfer to a four-year college or university to pursue a baccalaureate degree in this subject area. Students completing this curriculum will also satisfy the Michigan Transfer Agreement (MTA) between two-year and four-year institutions in Michigan and qualify for an LCC Transfer Studies Certificate of Achievement (1482).

**General Education - MTA: MINIMUM: 30 credits**

Complete General Education - MTA Requirements for the Associate of Arts Degree

A. English Composition: One course

B. English Composition (second course) or Communication: One course

C. Humanities and Fine Arts: A total of 2 courses, each from a different discipline

D. Mathematics: One course from Quantitative Reasoning, College Algebra or Statistics

E. Natural Sciences: A total of 2 courses, each from a different discipline; one must be a lab course

F. Social Science: A total of 2 courses, each from a different discipline

**For More Information**

Contact the Science Department in the Arts & Sciences Building, Room 3203, telephone number (517) 483-1092 or the Academic Advising Department, Gannon Building - StarZone, telephone number (517) 483-1904.

Semester I	Course Title	Prerequisites	Credit/Billing Hours
<b>General Education - Area A. English Composition - <i>Select 1</i></b>			
ENGL 121	Composition I	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	4 / 4
ENGL 131	Honors Composition I	Reading Level 5 and Writing Level 7	4 / 4
<b>General Education - Area F. Social Science - <i>Select 1</i></b>			
ANTH 270	Cultural Anthropology	Reading Level 5 and Writing Level 6	3 / 3
POLS 120	American Political System	Reading Level 5	4 / 4
PSYC 200	Introduction to Psychology	Reading Level 5 or (ENGL 098 or 099 concurrently)	4 / 4
SOCL 120	Introduction to Sociology	Reading Level 5 or (Reading Level 4 and ENGL 099 concurrently)	4 / 4

<b>General Education - Area D. Mathematics - <i>Select 1</i></b>			
MATH 151	Calculus I	(Minimum 2.0 in MATH 122 or 126 within 2 years or Math Level 9 within 2 years) and Reading Level 5 and Writing Level 6	4 / 4
<b>Program of Study Requirements</b>			
CHEM 151	General Chemistry Lecture I	Reading Level 5 and Writing Level 6 and (Math Level 6 or MATH 109 concurrently or MATH 112 concurrently)	4 / 4
CHEM 161	General Chemistry Lab I	Minimum 2.0 in CHEM 151 or concurrently and Reading Level 5 and Writing Level 6 and (Math Level 6 or MATH 109 or MATH 112 concurrently)	1 / 3
<b>Credits</b>			<b>16-17 / 18-19</b>
<b>Semester II</b>	<b>Course Title</b>	<b>Prerequisites</b>	<b>Credit/Billing Hours</b>
<b>General Education - Area B. English Composition or Communication - <i>Select 1</i></b>			
ENGL 122	Composition II	Minimum 2.0 in ENGL 121 or ENGL 131 or (Reading Level 5 and Writing Level 8)	4 / 4
ENGL 132	Honors Composition II	Minimum 3.5 in ENGL 121 or ENGL 131 or Reading Level 5 and Writing Level 8	4 / 4
<b>General Education - Area C. Humanities and Fine Arts - <i>Select 1</i></b>			
HUMS 213	World Civilizations to 1600	Reading Level 5 and Writing Level 6	4 / 4
HUMS 214	World Civilizations from 1600	Reading Level 5 and Writing Level 6	4 / 4
PHIL 151	Intro to Logic & Critical Think	Reading Level 5	4 / 4
RELG 150	Intro to World Religions	Reading Level 5 and Writing Level 6 or (ENGL 098 or 099 concurrently)	4 / 4

<b>Program of Study Requirements</b>			
CHEM 152	General Chemistry Lecture II	Minimum 2.0 in CHEM 151 and (Math Level 7 or MATH 121 or MATH 126 or concurrently) and Reading Level 5 and Writing Level 6	3 / 3
CHEM 162	General Chemistry Lab II	Minimum 2.0 in (CHEM 152 or concurrently) and CHEM 161 and Reading Level 5 and Writing Level 6 and Math Level 7 (or Math 121 or Math 126 or concurrently)	1 / 3
MATH 152	Calculus II	(Minimum 2.0 in MATH 151 or MATH 161 within 2 years) and Reading Level 5 and Writing Level 6	4 / 4
<b>Credits</b>			<b>16 / 18</b>
<b>Semester III</b>	<b>Course Title</b>	<b>Prerequisites</b>	<b>Credit/Billing Hours</b>
<b>General Education - Area E. Natural Sciences - <i>Select 1</i></b>			
BIOL 127	Cell Biology	(Minimum 2.0 in CHEM 120) or (Minimum 2.0 in CHEM 151 or concurrently) and Reading Level 5 and Writing Level 6 and Math Level 4	4 / 6
<b>General Education - Area F. Social Science - <i>Select 1</i></b>			
ANTH 270	Cultural Anthropology	Reading Level 5 and Writing Level 6	3 / 3
POLS 120	American Political System	Reading Level 5	4 / 4
PSYC 200	Introduction to Psychology	Reading Level 5 or or ENGL 098 or 099 concurrently	4 / 4
SOCL 120	Introduction to Sociology	Reading Level 5 or (Reading Level 4 and ENGL 099 concurrently)	4 / 4

<b>Program of Study Requirements</b>			
CHEM 251	Organic Chemistry Lecture I	Minimum 2.0 in CHEM 151 and Reading Level 5 and Writing Level 6	4 / 4
CHEM 262	Quantitative Analysis	(Minimum 2.0 in CHEM 152 and CHEM 162) and Reading Level 5 and Writing Level 6 and Math Level 7	3 / 6
<b>Electives - <i>Select 1</i></b> <i>Courses may not be duplicated</i>			
ISCI 245	S.T.E.M. Workplace Practices	Reading Level 5 and Writing Level 6 and (Math Level 5 or MATH 109 concurrently or MATH 112 concurrently)	4 / 6
MATH 253	Calculus III	(Minimum 2.0 in MATH 152 or MATH 162 within 2 years) and Reading Level 5 and Writing Level 6	4 / 4
PHYS 251	Physics I with Calculus	(Minimum 2.0 in MATH 152 or MATH 162 or concurrently) and Reading Level 5 and Writing Level 6	5 / 7
PHYS 252	Physics II with Calculus	Minimum 2.0 in PHYS 251 and (Minimum 2.0 in MATH 152 or MATH 162) and Reading Level 5 and Writing Level 6	5 / 7
<b>Credits</b>			<b>18-20 / 23-27</b>

Semester IV	Course Title	Prerequisites	Credit/Billing Hours
<b>Program of Study Requirements</b>			
CHEM 252	Organic Chemistry Lecture II	Minimum 2.0 in CHEM 251 and Reading Level 5 and Writing Level 6	4 / 4
CHEM 272	Organic Chemistry Laboratory	Minimum 2.0 in CHEM 251 and Reading Level 5 and Writing Level 6	2 / 6
<b>General Education - Area C. Humanities and Fine Arts - <i>Select 1</i></b> <i>MUST from a different code than those previously selected.</i>			
HIST 212	U.S. History: 1877 to Present	Reading Level 5 and Writing Level 6	4 / 4
PHIL 151	Intro to Logic & Critical Think	Reading Level 5	4 / 4
PHIL 152	Introduction to Ethics	Reading Level 5 and Writing Level 6	4 / 4
RELG 150	Intro to World Religions	Reading Level 5 and Writing Level 6 or (ENGL 098 or 099 concurrently)	4 / 4
<b>Electives - <i>Select 1</i></b> <i>Courses may not be duplicated</i>			
ISCI 245	S.T.E.M. Workplace Practices	Reading Level 5 and Writing Level 6 and (Math Level 5 or MATH 109 concurrently or MATH 112 concurrently)	4 / 6
MATH 253	Calculus III	(Minimum 2.0 in MATH 152 or MATH 162 within 2 years) and Reading Level 5 and Writing Level 6	4 / 4
PHYS 251	Physics I with Calculus	(Minimum 2.0 in MATH 152 or MATH 162 or concurrently) and Reading Level 5 and Writing Level 6	5 / 7
PHYS 252	Physics II with Calculus	Minimum 2.0 in PHYS 251 and (Minimum 2.0 in MATH 152 or MATH 162) and Reading Level 5 and Writing Level 6	5 / 7
<b>Credits</b>			<b>14-15 / 18-21</b>
<b>Total Credits</b>			<b>64-68 / 77-85</b>