

# Liberal Arts: Mathematics and Science (Chemistry Track) Degree Map



◆ TRANSFER DEGREE | M MIDDLETOWN CAMPUS | DL DISTANCE LEARNING

## Career and Transfer Focus

Chemists find employment in many fields that:

- Discover new, groundbreaking materials
- Synthesize lifesaving pharmaceutical medicines
- Develop cutting edge technology used in industry, military, and other government agencies
- Design solutions for a more environmentally friendly and greener tomorrow
- Analyze materials in forensics science and quality control

Chemistry is one of the main undergraduate degrees accepted at medical schools. Chemists can also lead the future by educating our next generation at the high school or university level.

Our chemistry students often transfer to four-year institutions to earn a bachelor's degree. Many students continue their studies towards a master's degree or a Ph.D.

## Three Reasons to Consider the Chemistry Track in Liberal Arts: Mathematics and Natural Science

1. A rigorous and exciting program where you are taught and advised directly by chemistry professors with many years of experience in a personalized classroom environment. We want to get to know you and are here to help you to succeed.
2. You will work with a close cohort of chemistry students and will be able to develop social connections and establish a system of academic support. You will be able to network through former students.
3. You will get hands-on experience in the laboratory with the same chemistry professors as your lecture. There are no teaching assistants at SUNY Orange.

## Keep This in Mind

Chemistry lectures are taught without a textbook and with minimal required materials which saves you money!

Required courses for the program have small lecture (no more than 30 students) and laboratory (no more than 20 students) sizes, allowing you to directly interact with faculty.

Chemistry Club allows you to visit laboratories and industries, network with others in the field, build relationships with peers, and help spread interest of the field to high school and elementary students.

This program requires a sound understanding of mathematics and a passion for learning and chemistry

## Chemistry Track Gateway Courses:

- Gateway courses: MAT 102 or 121 (MAT 121 recommended), CHM 101, PHY 105
- Key courses: CHM 101, CHM 102, CHM 201, CHM 202, PHY 105, PHY 106, MAT 102, MAT 121, MAT 122, MAT 205, MAT 206
- Electives: BIO 101, GLG 101

*Courses above have been recommended by the department to help introduce you to the program (Gateway courses) and guide you in selecting courses that will provide you with the best academic experience (Key courses and suggested Electives).*

## First Semester

Course #	Course Name	P, C, P/C	Cr
ENG 101	Freshman English 1	P	3
CHM 101	General Chemistry 1 w/Lab	P	4
BIO 101	General Biology w/Lab		4
MAT 205	Calculus 1	P	4
	Total Semester Credits		15

## Milestones

During this semester, students should:

- Meet with your departmental advisor
- Join the Chemistry Club
- Complete gateway courses

# SUNY Orange

## Second Semester

Course #	Course Name	P, C, P/C	Cr
ENG 102	Freshman English 2	P	3
CHM 102	General Chemistry 2 w/Lab	P	4
PHY 105	General Physics 1 with Calculus w/Lab	P	4
MAT 206	Calculus 2	P	4
	Total Semester Credits		15

### Milestones

#### During this semester, students should:

- Visit Transfer Fair
- Seek scholarship opportunities
- Meet with your departmental advisor

## Third Semester

Course #	Course Name	P, C, P/C	Cr
COM 101	Foundations of Communication		3
CHM 201	Organic Chemistry 1 w/Lab	P	4
_____	SUNY Elective (GE 4, 5 or 6)		3
_____	SUNY Elective (GE 8 or 9)		3
PHY 106	General Physics 2 with Calculus w/Lab	P, P/C	4
	Total Semester Credits		17

### Milestones

#### During this semester, students should:

- Apply to/visit transfer schools and get letters of recommendation (or apply/interview for jobs)
- Meet with your departmental advisor
- Seek leadership opportunities in Chemistry Club or Student Senate

## Fourth Semester

Course #	Course Name	P, C, P/C	Cr
CHM 202	Organic Chemistry 2 w/Lab	P	4
_____	SUNY Elective (GE 3)		3
MAT 120	Introduction to Statistics	P	3
_____	Elective		3
_____	Elective		3
	Total Semester Credits		16

### Milestones

#### During this semester, students should:

- Reply to acceptance letter from your transfer school (or apply/interview for jobs)
- Seek scholarship opportunities
- Apply for graduation
- Prepare for transfer

**TOTAL DEGREE CREDITS: 63**