ACADEMIC MAP - CHEMISTRY

2025-2026

NORTHWESTERN STATE UNIVERSITY OF LOUISIANA

Department of Physical Science
nsula.edu/physical-science

START HERE

YEAR 1

SEMESTER 1	Milestones	Grade	Credits	Minimum Grade
MATH 1100 – Precalculus Mathematics			6	C
BIOL 1010 – Biological Principles I	⚗		3	C
BIOL 1011 – Biological Principles I Lab	⚗		1	C
CHEM 1030 – General Chemistry I	⚗		3	C
CHEM 1031 –General Chemistry I Lab	⚗		1	C
UNIV 1000 – The University Experience			1	

Electives	Credits
Concentration	
Science	
Academic	

Semester Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade
ENGL 1010 – Composition & Rhetoric I	⚗		3	C
MATH 2100 – Analytical Geometry and Calculus I	⚗		5	D
CHEM 1040 – General Chemistry II	⚗		3	C
CHEM 1041 –General Chemistry II Lab	⚗		1	C
BIOL 1020 – Biological Principles II	⚗		3	C
BIOL 1021 – Biological Principles II Lab			1	C

Electives	Credits
Concentration	
Science	
Academic	

Semester Credits _____

Total Credits _____

YEAR 2

SEMESTER 1	Milestones	Grade	Credits	Minimum Grade
PHYS 2510–General Analytical Physics I	⚗		3	C
PHYS 2511–General Analytical Physics I Lab	⚗		1	C
MATH 2110 – Analytical Geometry and Calculus II	⚗		5	D
ENGL 1020 –Composition & Rhetoric II	⚗		3	C
#Chem 3010 – Organic Chemistry I	⚗		3	C
#Chem 3011 – Organic Chemistry I Lab	⚗		1	C

Electives	Credits
Concentration	
Science	
Academic	

 # ACS required courses

Semester Credits _____

Total Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade
PHYS 2520–General Analytical Physics II	⚗		3	C
PHYS 2521–General Analytical Physics II Lab			1	C
*CHEM 3020 - Organic Chemistry II	⚗		3	C
*Chem 3021 – Organic Chemistry II Lab	⚗		1	C
ENGL 2110 – Introduction to Literature			3	
#CHEM 2140 – Inorganic Chemistry	⚗		3	C

Electives	Credits
Concentration	
Science	
Academic	

 # ACS required courses
*** This course may be exchanged for another chemistry elective.**

Semester Credits _____

Total Credits _____

YEAR 3

SEMESTER 1	Milestones	Grade	Credits	Minimum Grade
COMM 1010 or 2500 – Oral Communication or Interpersonal Communication			3	
#CHEM 2110- Quantitative Analysis	⚗		3	C
#CHEM 2111- Quantitative Analysis Lab	⚗		1	C
FA 1040-Exploring the Arts			3	
#CHEM 3210 – Chemical Thermodynamics	⚗		3	C
Academic Elective			2	

Electives	Credits
Concentration	
Science	
Academic	

 # ACS required courses

Semester Credits _____

Total Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade
#CHEM 4040 - General Biochemistry I	⚗		3	C
*CHEM 3220 – Chemical Kinetics & Quantum Mechanics			3	C
HIST 1010 or 1020 or 2010 or 2020			3	
Academic Elective			3	
*CHEM 2120 – Introduction to Instrumental Analysis			3	C
*CHEM 2121 – Introduction to Instrumental Analysis Lab				C

Electives	Credits
Concentration	
Science	
Academic	

 # ACS required courses
*** This course may be exchanged for another chemistry elective.**
- Apply to graduate school(s).
- Verify requirements for schools of your choice.

Semester Credits _____

Total Credits _____

YEAR 4

SEMESTER 1	Milestones	Grade	Credits	Minimum Grade
CHEM 4910- Capstone Course for Chemistry	⚗		3	C
GEOG 1010 or ANTH 1510 or ECON 2000 or PSIC 2010 or PHIL 1010			3	
Chemistry elective			2	C
Science Elective			7	C

Electives	Credits
Concentration	
Science	
Academic	

Semester Credits _____

Total Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade
CHEM 4920 - Scientific Communication	⚗		3	C
PSYC 1010 or PSYC 2050 or SOC 1010 or EPSY 2020			3	
Science Elective			7	C

Electives	Credits
Concentration	35
Science	9
Academic	11

Semester Credits _____

Total Credits 120

YOU'VE FINISHED!

⚗ **Milestone**
Should be taken in order to stay on track for graduation and professional school readiness.

Chemistry elective

Science elective

Academic elective

This is for chemistry concentration, for other concentration or majors, consult with your advisor for any suggested changes.

GRADUATION REQUIREMENTS

Semester = 120, Science Electives = 14, Chemistry Concentration Electives = 30, Academic Electives = 11

ACADEMIC MAP - CHEMISTRY

NORTHWESTERN STATE
UNIVERSITY OF LOUISIANA

List of Science Electives	# of credits
MATH 3130 – Analytical Geometry and Calculus III	3
CHEM 2110 – Quantitative Analysis	3
CHEM 2111 – Quantitative Analysis Laboratory	1
CHEM 2120 – Introduction to Instrumental Analysis	3
CHEM 2121 – Introduction to Instrumental Analysis Laboratory	1
CHEM 2140 – Inorganic Chemistry	3
CHEM 2141 – Inorganic Chemistry Laboratory	1
CHEM 2160 – Environmental Chemistry	3
CHEM 2200 – Practicum for Chemistry Teaching	1
CHEM 3010 – Organic Chemistry I	3
CHEM 3011 – Organic Chemistry I Lab	1
CHEM 3020 – Organic Chemistry II	3
CHEM 3021 – Organic Chemistry II Lab	1
CHEM 3100 – Medicinal Chemistry	3
CHEM 3210 – Chemical Thermodynamics	3
CHEM 3220 – Chemical Kinetics and Quantum Mechanics	3
CHEM 3221 – Physical Chemistry Laboratory	2
CHEM 3900 – Special Topics in Chemistry	1-3
CHEM 4040 – General Biochemistry I	3
CHEM 4041 – General Biochemistry I Lab	1
CHEM 4050 – General Biochemistry II	3
CHEM 4140 – Advanced Inorganic Chemistry	3
CHEM 4160 – Forensic Chemistry	3
CHEM 4161 – Forensic Chemistry Lab	2
CHEM 4950 – Research Problems in Chemistry	1-4

- **Science electives: Students may select any course from Physics, Chemistry, Mathematics, or Biology.**
- **Academic Electives: Students are limited to a maximum of 6 hours of 1000-level courses.**