

## Chemistry Major, Bachelor of Arts

This program is designed for the student who wishes to attend professional school, pursue a career in chemistry education, or combine the study of chemistry with that of another discipline (e.g., biology, business, communication, criminology, etc.)

Below is a suggested schedule of courses. This information is provided as a guide and does not supersede information provided by advisors or the Undergraduate Catalog. Each student will develop a specific course schedule in consultation with their departmental advisor. For details of all the University, College and Departmental requirements for graduation, students should consult the Catalog.

**52 hours** is required (not including Foundational Studies requirements). (F, S and Sum indicate that this course is usually offered in Fall, Spring and Summer semesters.)

### Freshman Year:

CHEM 105 (General Chem I; 3 hr; F, S and Sum)  
CHEM 105L (General Chem I Lab; 1 hr; F, S and Sum)  
CHEM 106 (General Chem II; 3 hr; F, S and Sum)  
CHEM 106L (General Chem II Lab; 1 hr; F, S and Sum)  
MATH 131 (Calculus I; 4 hr; F, S and Sum)  
MATH 132 (Calculus II; 4 hr; F, S, and Sum)

### Sophomore Year:

CHEM 321 (Analytical Chem I; 3 hr; S)  
CHEM 321L (Analytical Chem I Lab; 1 hr; S)  
CHEM 351 (Organic Chem I; 3 hr; F and Sum)  
CHEM 351L (Organic Chem I Lab; 1 hr; F and Sum)  
CHEM 352 (Organic Chem II; 3 hr; S and Sum)  
CHEM 352L (Organic Chem II Lab; 1 hr; S and Sum)  
PHYS 105 (General Phys I; 3 hr; F)  
PHYS 105L (General Phys I Lab; 1 hr; F)  
PHYS 106 (General Phys II; 3 hr; S)  
PHYS 106L (General Phys II Lab; 1 hr S)

### Junior Year:

CHEM 341 (Inorganic Chemistry; 3 hr; S)  
CHEM 431 (Biochemistry I, 3 hr; F)  
CHEM 431L (Biochemistry I Lab.; 1 hr; F)  
CHEM 461 (Physical Chem I; 4 hr; F)  
CHEM 461L (Phys. Chem I Lab; 1 hr; F)

### Senior Year:

CHEM 405 (Senior Seminar in Chemistry; 1 hr; F)

**Advanced Electives** (3 hr required): Choose approved advanced courses in chemistry. CHEM 300, 340, 355, 421/L, 432, 462/L, 495, 499, and other courses offered on alternate years will count. (See class schedule or consult your advisor to determine when these courses will be offered.) CHEM 495 (Internship in Chemistry) or 499 (Introduction to Research) can be taken for variable credit. CHEM 330 and 399 cannot be used as advanced electives. Science Education students may take SCED 396L or 398L.

## Bachelor of Arts in Chemistry Curriculum

The degree courses are in boldface. The plan below is only a suggested sequence, but courses must be taken with observance of prerequisites. Prerequisites are indicated in brackets.

	Fall	Spring
Freshman	<b>CHEM 105</b> [see catalog for <b>CHEM 105L</b> math recommend.] 3 <b>MATH 131*</b> [Maple score of 21 or MATH 112 and 115] 4 English course* 3 Found. Stud. courses (2) 6 17	<b>CHEM 106</b> [CHEM 105/L] 3 <b>CHEM 106L</b> 1 <b>MATH 132</b> [MATH 131] 4 COMM 101 3 Found. Stud. course 3 14
Sophomore	<b>CHEM 351</b> [CHEM 105/L] 3 <b>CHEM 351L</b> 1 <b>PHYS 105</b> [Maple score of 21 or MATH 115 or MET 215] 3 <b>PHYS 105L</b> 1 Found. Stud. courses (3) 9 17	<b>CHEM 352</b> [CHEM 351] 3 <b>CHEM 352L</b> [CHEM 351L] 1 <b>CHEM 321</b> [CHEM 106/L] 3 <b>CHEM 321L</b> 1 <b>PHYS 106</b> [PHYS 105/L] 3 <b>PHYS 106L</b> 1 Found. Stud. course 3 15
Junior	<b>CHEM 461</b> [CHEM 106/L; MATH 132; PHYS 106/L or 116/L] 4 <b>CHEM 461L</b> 1 <b>CHEM 431</b> [CHEM 352] 3 <b>CHEM 431L</b> [CHEM 352] 1 ENG 305T 3 Found. Stud. course 3 15	<b>CHEM 341</b> [CHEM 352] 3 <b>Advanced elective**</b> 3 Found. Stud. courses (3) 9 15
Senior	<b>CHEM 405</b> 1 General electives* 14 15	General electives* 12 12

[Prerequisite]

\* Specific requirements are determined by proficiencies met upon entering. You may need to start with a lower-level math course before MATH 131 (Calculus I), but calculus should be started in your first semester if you place into it. You may need to add a basic skills course. You may need one semester of English (107) or two (101 & 105). You may or may not need to take language courses as part of the Foundational Studies curriculum. Additional courses reduce the number of “general elective” courses later in the curriculum. One Foundational Studies UDIE course may be replaced by completion of a minor, second major, or certificate. Completion of the Honors Program may reduce the number of Foundational Studies courses required. Completion of 120 total credits is a University requirement.

\*\*A total of 3 credits advanced chemistry electives is required.