

PROGRAM NAME: CHEMISTRY, General Track
 PROGRAM COLLEGE: ARTS AND SCIENCES
 CATALOG TERM: 2019

Our chemistry department is accredited by the American Chemical Society (ACS). We offer a broad spectrum of courses designed to meet the specific needs of students and a variety of vocational objectives. Our faculty work closely with each chemistry student in both the class and lab setting as well as during independent research in order to provide practical, real-world exposure to important scientific questions. We are proud that our graduates have very high success rates in continuing their education in graduate and professional schools as well as direct placement in regional industries.

Note below that the required courses often add up to 15 credits per semester. This allows our students to double major or get a minor in another discipline if this is their desire.

NOTE: Individual Programs of Study will vary in consultation with your Advisor and course/section availability each term. The below schedule serves only as an **example** four-year degree plan. **Courses that are required to be taken in the respective semester are given in bold.**

YEAR 1

Fall Semester

Course Name	Credits	Minimum Grade Required	Experience Notes
MT 1800 Calculus I (MTP)	4		<ul style="list-style-type: none"> Join an RU Academy Participate in the Finucane Service Project Attend the New Student Retreat
CH 2610 General Chemistry I (SCI)	3	C	
CH 2620 General Chemistry I Laboratory (SCI)	1	C	
NS 1000 Freshman in Science Seminar	1		
Core: Written Communication I (WCP)	3		
BL 1250 General Biology I***	3		
BL 1251 General Biology I Laboratory***	1		
TOTAL HOURS	16		

***Not required.

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
MT 1810 Calculus II	4		<ul style="list-style-type: none"> Join our ACS student chapter
CH 2630 General Chemistry II (SCII)	3	C	
CH 2640: General Chemistry II Laboratory (SCII)	1	C	
BL 1250 General Biology II***	3		
BL 1251 General Biology II Laboratory***	1		
Core: Theological Mode Lv I (THI)	3		
TOTAL HOURS	15		

***Not required.

YEAR 2

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
CH 2710 Organic Chemistry I	3		<ul style="list-style-type: none"> Consider getting involved in undergraduate research
CH 2720 Organic Chemistry Laboratory I	1		
PH 2700 Physics for Life Sciences I***	3		
PH 2710 Physics for Life Sciences I*** Laboratory	1		
Core: Written Communication II (WCP)	3		
Core: Oral Communication (OCP)	3		
Core: PL 1100 Philosophical Mode Lv I (PLI)	3		
TOTAL HOURS	17		

*** For a career in graduate school or industry, PH 2850/2860 and PH 2940/2920 are recommended.

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
CH 2710 Organic Chemistry II	3	C	<ul style="list-style-type: none"> It is very important to take Analytical Chemistry this semester or your graduation could be postponed. Join our chapter of The National Chemistry Honor Society, Phi Lambda Upsilon
CH 2720 Organic Chemistry Laboratory II	1	C	
CH 3450 Analytical Chemistry	3	C	
CH 3460 Analytical Chemistry Lab	1	C	
PH 2750 Physics for Life Sciences II***	3		
PH 2760 Physics for Life Sciences II*** Laboratory	1		
Core: PH 3100 Philosophical Mode Lv II (PLII)	3		
TOTAL HOURS	15		

*** For a career in graduate school or industry, PH 2850/2860 and PH 2940/2920 are recommended.

YEAR 3

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
CH 3310 Biochemistry I	3	C	<ul style="list-style-type: none"> Consider taking CH 4430 Applied Instrumental Methods of Analysis I (even years) or CH 4450 Applied Instrumental Methods of Analysis II (odd years). Only one of these two courses is required for graduation but you can choose the other as an elective.
CH 3510 Physical Chemistry I***	3		
CH 4650 Inorganic Chemistry (even years) or Upper-level elective in related area	3	C	
Core: Scientific-Relational Mode Lv I (SRI)	3		
Core: Theological Mode Lv II (THII)	3		
TOTAL HOURS	15		

*** CH 3560 Physical Chemistry Laboratory is offered only on even years. Take the Physical Chemistry sequence in your junior or senior year.

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
CH 3530 Physical Chemistry II***	3	C	
Chemistry Elective(s)	3-4	C	
Core: Scientific-Relational Mode Lv I/II (SRI/SRII)	3		
Core: Philosophical or Theological Mode Lv II (PLII or THII)	3		
TOTAL HOURS			

Upper-level elective in related area	3-4		
TOTAL HOURS	16-18		

*** CH 3560 Physical Chemistry Laboratory is offered only on even years. Take the Physical Chemistry sequence in your junior or senior year.

YEAR 4

Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
CH 4650 Inorganic Chemistry (even years) or Upper-level elective in related area	3		
CH 4960 - Chemical Literature and Seminar	1		
Core: Historical Mode Lv I (HSI)	3		
Core: Literary Mode Lv I (LTI)	3		
Core: Global Perspectives	3		
Upper-level elective in related area	3-4		
TOTAL HOURS	16-17		

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
CH 4430 Advanced Methods of Analysis I (even years) or CH 4450 Advanced Methods of Analysis II (odd years)***	3	C	
Chemistry Elective(s)	3-4	C	
Upper-level elective in related area	3-4		
Core: Historical or Literary Mode Lv II (HSII or LTII)	3		
Core: Artistic Mode (ARI)	3		
TOTAL HOURS	15-17		

***Only one of these two courses is required for graduation.

Credit Hours

- Core: (57)
- Major: (58 hours, 26 upper division)
- Electives (18 hours)

TOTAL Credit Hours: 123-126

Note: Additional hours might be required to fulfill the 128 credits required to fulfill the B.S. degree requirements.