

CHEMISTRY, BACHELOR OF SCIENCE

2018-2019 Degree Plans

University Core Requirements (43* Hours)	UHCL Course Title	TCCNS	CODE
Communications (6 hours):	WRIT 1301—Composition I (<i>Grade must be "C-" or better</i>)	ENGL 1301	010
	WRIT 1302—Composition II (<i>Grade must be "C-" or better</i>)	ENGL 1302	010
Mathematics (4* hours):	MATH 2413—Calculus I (<i>Grade must be "C-" or better</i>)	MATH 2413	020
*Three (3) hours of Calculus will count toward the University Core and one (1) hour will count toward the Major			
Life and Physical Sciences (6 hours):	CHEM 1311—General Chemistry I (<i>lecture, Grade must be "C-" or better</i>)	CHEM 1311	030
	CHEM 1312—General Chemistry II (<i>lecture, Grade must be "C-" or better</i>)	CHEM 1312	030
Language, Philosophy, and Culture (3 hours):	Choose ONE course from the core approved list		040
Creative Arts (3 hours):	Choose ONE course from the core approved list		050
U.S. History (6 hours):	HIST 1301—U.S. History I	HIST 1301	060
	HIST 1302—U.S. History II	HIST 1302	060
Government/Political Science (6 hours):	POLS 2305—Federal Government	GOVT 2305	070
	POLS 2306—Texas Government	GOVT 2306	070
Social/Behavioral Science (3 hours):	Choose ONE course from the core approved list		080
Component Area Option (6 hours):	COMM 1315—Public Speaking	SPCH 1315	090
	PSYC 1100—Learning Frameworks	PSYC 1100	090
	CHEM 1111—Lab General Chemistry I (<i>Grade must be "C-" or better</i>)	CHEM 1111	090
	CHEM 1112—Lab for General Chemistry II (<i>Grade must be "C-" or better</i>)	CHEM 1112	090

Major Requirements (67 hours)	UHCL Course Title	TCCNS	CODE
<i>Required minimum grade is "C-" in the following classes:</i>			
	WRIT 3315—Technical Writing		
	PHYS 2325/2125—University Physics I & Lab	PHYS 2325/2125	030/090
	PHYS 2326/2126—University Physics II & Lab	PHYS 2326/2126	030/090
	MATH 2414—Calculus II	MATH 2414	
	CHEM 2323/2123—Organic Chemistry I & Lab	CHEM 2323/2123	
	CHEM 2325/2125—Organic Chemistry II & Lab	CHEM 2325/2125	
	CHEM 4335—Inorganic Chemistry		
	CHEM 4235—Advanced Lab for Inorganic Chemistry		
	CHEM 4321—Physical Chemistry I		
	CHEM 4322—Physical Chemistry II		
	CHEM 4222—Lab for Physical Chemistry		
	CHEM 3310—Advanced Chemical Calculations		
	CHEM 4268—Lab for Instrumental Analysis		
	CHEM 4274—Lab for Quantitative Chemical Analysis		
	CHEM 4341—Biochemistry I		
	CHEM 4365—Introduction to Polymer Chemistry		
	CHEM 4367—Instrumental Analysis		
	CHEM 4368—Advanced Organic Chemistry		
	CHEM 4371—Advanced Spectroscopic Analysis		
	CHEM 4372—Chemistry Seminar		
	CHEM 4373—Quantitative Chemical Analysis		
	CHEM 4379—Undergraduate Research		

Major Electives (10 hours)**UHCL Course Title**

(C- or better required, selected with faculty advisor approval) Must be from approved list below, or other junior or senior (3xxx or 4xxx) level Physical Science classes: ASTR, GEOL, PHYS, CHEM or other science or math class approved by the faculty advisor. No more than 2 courses in the same area. Courses in BIOL (Cell & Molecular Biology, Anatomy, Genetics, Ecology), PSYC, and SOCI required for MCAT and DAT tests will be accepted with faculty approval.

Approved List:

CHEM 4312—Principles of Astrobiochemistry
CHEM 4311—Chemical Origins
CHEM 4328—Introduction to Medical Chemistry
CHEM 4363—Forensic Chemistry
CHEM 4359—Drug Discovery and Design
CHEM 4355—Environmental Sampling and Monitoring
CHEM 4251—Lab for Environmental Analysis
CHEM 4342—Biochemistry II
CHEM 4315—Handedness in Science
CHEM 3333—Environmental Chemistry
CHEM 4189—Independent Study in Chemistry (1 hour credit)
CHEM 4376—Introduction to Petroleum Chemistry
CHEM 4389—Independent Study in Chemistry (3 hours credit)
CHEM 4391—Chemistry: Topics
CHEM 4360—Bio-Organic and Medicinal Chemistry

General Degree Requirements

- Students must complete at least 120 semester credit hours. A minimum of 45 hours of the 120 semester hours must be advanced (3000-4000 level) course work according to the requirements of the respective major.
- Students must complete the University Core Curriculum requirements (refer to Core Curriculum Requirements section of this catalog).
- Students must fulfill the statutory requirements of the Texas State Education Code, including the following:
 - Six hours of U.S. History (three hours may be Texas History).
 - Six hours of Constitutions of the United States and Texas.
- Students must demonstrate writing proficiency by completing nine hours of lower-level (1000-2000 level) and upper-level (3000-4000 level) English composition course credit with a minimum grade of "C-" or better. Some majors may require higher grades in English composition.
- Students must complete at least 25% of the credit hours required for the degree (i.e., 30 semester credit hours for a 120 credit hour program) through instruction offered by UHCL to fulfill the Southern Association of Colleges and Schools (SACS) residency requirements.
- Students must complete the final 30 semester hours of 3000 and 4000 level course work in residence at UHCL.
- Students must complete a minimum of 12 semester credit hours of upper-level (3000-4000 level) coursework in the major in residence at UHCL.
- Students must have a cumulative GPA of 2.000 on course work completed at UHCL with grades of "C" or better on at least 30 hours of resident upper-level work. Grades of "C-" or below cannot be applied toward the 30 hours of resident upper-level work.