

BACHELOR OF SCIENCE - BIOLOGICAL SCIENCES

Cellular/Molecular/Biotechnology specialization
2019-2020 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
*Three (3) hours of Calculus will count toward the University Core and one (1) hour will count toward the Major			
Mathematics (4* hours):	MATH 2413—Calculus I (<i>Grade must be “C-” or better</i>)	MATH 2413	020
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 (44 hours)	UHCL Course Title	TCCNS*	CODE
<i>Required minimum grade is “C-” in the following classes:</i>			
	STAT 3308—Computational Statistics		
	WRIT 3315—Advanced Technical Writing		
Required minimum grade for all remaining Major Requirements is “C”. Grades of “C -” and below are not accepted.			
	BIOL 1306/1106—Biology for Science Majors I & Lab I	BIOL 1306/1106	030/090
	BIOL 1307/1107—Biology for Science Majors II & Lab II	BIOL 1307/1107	030/090
	BIOL 3341/3141—Molecular Genetics & Lab		
	BIOL 4311—Ecology		
	BIOL 4278—Seminar in Biology		
	BIOL 4341/4242—Biochemistry I & Lab		
	PHYS 1301/1101—College Physics I & Lab	PHYS 1301/1101	030/090
	PHYS 1302/1102—College Physics II & Lab	PHYS 1302/1102	030/090
	CHEM 2323/2123—Organic Chemistry I & Lab	CHEM 2323/2123	
	CHEM 2325/2125—Organic Chemistry II & Lab	CHEM 2325/2125	
Specialization Requirements (23 hours)	UHCL Course Title		
Required minimum grade for Specialization Requirements is “C”. Grades of “C -” and below are not accepted.			
	BIOL 2321/2121—Microbiology for Science Majors & Lab	BIOL 2321/2121	
	BIOL 3373/3173 or 3313/3113 or BIOL 2428 Human Anatomy & Lab, Plant Anatomy & Lab, or Vertebrate Zoology(includes lab)		

Degree plan continued on reverse side

Specialization Requirements (23 hours, continued)

BIOL 4345 or 4344 or 4343
Human Physiology, Comparative Animal Physiology, or Plant Physiology

BIOL 4342—Biochemistry II

BIOL 4347—Cellular Physiology

BIOL 4348—Developmental Biology

BIOL 4351—Molecular Biology I

Specialization Electives (10 hours)

Required minimum grade is "C-" for all Specialization Electives

Choose from BIOL 4332,4346,4252,4355,4253,4361,4254,4371,4189,4289,4389,4391, or other courses from lists above.

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 in the UHCL 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.