

**BIOLOGY, BACHELOR OF SCIENCE**

## Cellular/Molecular/Biotechnology Specialization

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
*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—Technical Writing		
<i>Required minimum grade for all remaining Major Requirements is "C". Grades of "C-" and below are not accepted.</i>			
	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	TCCNS	CODE
<i>Required minimum grade for Specialization Requirements is "C". Grades of "C-" and below are not accepted.</i>			
	BIOL 2321/2121—Microbiology for Science Majors & Lab	BIOL 2321/2121	
	BIOL 3373/3173 or 3313/3113 or BIOL 2428 Human Anatomy & Lab or 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, or 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, X3XX or other approved elective.

**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.