

BACHELOR OF ARTS - MATHEMATICAL SCIENCE

High School Teacher Certification, Mathematics 7-12
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
Mathematics (4 hours):	MATH 2413—Calculus I	MATH 2413	020
Life and Physical Sciences (6 hours):	Choose TWO courses from the core approved list		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
	Two 1-hr Life/Physical Science Labs		090

COE Core Requirements (19 hours):	UHCL Course Title	TCCNS*	CODE
	TCED 1301—Exploring Teaching as a Profession	EDUC 1301	
	SPED 2301—Introduction to Special Populations	EDUC 2301	
	INST 3313—Survey of Instructional Technologies		
	EDUC 4310—Theories of Educational Psychology		
	SILC 4315—Theories of American Pluralism		
	TCED 4102--Secondary (4-8 & 7-12) Content Teacher Seminar		
	SPED 4300—Survey of Exceptionalities		

Teacher Education Program (TEP) Admission Requirements:

- Completion of 60 semester credit hours.
- Completion of prerequisite coursework (EDUC 4310, INST 3313, SILC 4315 & TCED 4102).
- Public speaking requirement met.
- Basic skills in reading, mathematics & writing requirements met.
- 2.750 GPA overall or in the last 60 semesters credit hours.
- Completed 15 semester credit hours in mathematics.
- \$37 TEA Admission Fee
- Application for admission to the Teacher Education Program (TEP)

Major Requirements (49 hours):

(All major requirements must be C- or better except Technical Writing (C+))

LLLS 4351—Reading in Content Subjects
 TCED 4306 Creating Positive Learning Environments in 7-12
 WRIT 3315—Technical Writing (Grade must be C+ or higher)
 MATH 2318—Linear Algebra
 MATH 2414—Calculus II
 MATH 2320—Differential Equations
 MATH 3300—Introduction to Modern Algebra & Number Theory
 MATH 3304—Algebra Through Technology
 MATH 3305—Euclidian/Non-Euclidian Geometry
 MATH 3312—Number Theory
 MATH 4344—Introduction to Probability

Choose ONE additional Natural Science Elective, in addition to the University Core science:

(3 hours from: ASTR, BIOL, CHEM, ENSC, GEOL or PHYS)

Choose FOUR courses from the following list of 8 choices:

MATH 2315—Calculus III
 MATH 3301—History of Mathematical Science
 MATH 4315—Numerical Analysis its Applications
 MATH 4316—Mathematic Software Applications
 MATH 4321—Predicate Logic
 MATH 4322—Introduction to Abstract Algebra
 MATH 4325—Theory of Models and Applications
 MATH 4345—Introduction to Statistics

Pedagogy Requirements (15 hours):

TCED 4363—Methods in Secondary Mathematics

TCED 4378—Pre-Service Internship I

TCED 4978—Pre-Service Internship II/Student Teaching

- Enrollment in the courses listed above requires admission to TEP.
- 3.000 GPA required in pedagogy coursework.
- TCED 4378 must be taken in the fall or spring semester immediately preceding the final semester.
- TCED 4978 must be taken in the final semester.

Teacher Certification Requirements

- Passing scores on the appropriate state assessments (Texas Examinations of Educator Standards [TExES]) are required for recommendation for teacher certification.
 - Mathematics 7-12 TExES #235
 - Pedagogy and Professional Responsibilities EC-12 TExES #160
- All courses outside the University Core must be C- or better.

General Degree Requirements

- Students must complete at least 127 semester credit hours. A minimum of 45 hours of the 126 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.