Degree Type – Bachelor of Interdisciplinary Studies (BIS)
Degree Title – Elementary Education with Teacher Certification (EC-6 or EC-12)

To prepare highly skilled professionals to assume roles and positions in teaching, research, educational leadership, and human development to contribute to the educational achievement of children in elementary settings.

A – GENERAL EDUCATION CORE – 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

Required

Mathematics – 3 hours
Choose the following or higher:
MATH 1314 College Algebra

Creative Arts – 3 hours
Choose one:
MUSI 1313 Teaching Music in the Elementary School
ARTS 1301 Art Appreciation

B – MAJOR REQUIREMENTS – 60 HOURS (39 advanced minimum)

1 – Academic Content – 30 hours minimum (15 advanced minimum)
Choose one (not completed in General Education Core):
ARTS 1301 Art Appreciation
MUSI 1313 Teaching Music in the Elementary School
Choose one (not completed in General Education Core):
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 3301 Biology Evolution
BIOL 4315 Inquiry-based Science and Laboratory Techniques (or BIOL 4387 Honors)
Choose one (not completed in General Education Core):
GEOL 1403 Physical Geology
ASTR 1401 Introduction to Astronomy I
GEOG 2313 Principles of Geography Physics Elementary
PSCI 3310 Planet Earth and Its Place
HIST 4390 Special Topics in World History
KINE 3355 Health and Motor Development
MATH 1350 Fundamentals of Mathematics I
MATH 1351 Fundamentals of Mathematics II
READ 3320 Early Literacy Development
READ 3324 Reading Comprehension and Assessment
For Bilingual Specialization, complete:
SPAN 4338 Children’s Literature in Spanish
For all other specializations, complete:
READ 3350 Literature and Disciplinary Learning in Elementary School

2 – Specialization – 18 hours (18 advanced)
The University of Texas - Rio Grande Valley

2015-2016

a – Bilingual Education – 18 hours (18 advanced)

Bilingual Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Bilingual Generalist certification and work in schools with children in early childhood through 6th grades.

Area of Certification: Bilingual Generalist (EC-6)

- SPAN 3304 Advanced Spanish for Bilingual Teachers
- EDBE 3322 Foundations of Bilingual Education and ESL
- EDBE 3323 The Development of Bilingualism
- EDBE 3324 Early Biliteracy
- EDBE 4305 Language Arts in the Bilingual Classroom
- EDBE 4306 The Bilingual Curriculum in the Content Areas

b – Early Childhood – 18 hours (18 advanced)

Early Childhood Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Generalist certification and work in schools with children in early childhood through 6th grades.

Area of Certification: Generalist (EC-6)

- ECED 4315 Linguistically Diverse Early Childhood Students
- ECED 4314 Dynamics of Play and Play Environments in Childhood
- ECED 4391 Foundations of Early Childhood Education
- ECED 4392 Guidance of Young Children
- ECED 4393 Cross-Cultural Perspectives in Elementary School Settings
- ECED 4394 Principles of Curriculum Design in Early Childhood

c – English as a Second Language (ESL) – 18 hours (18 advanced)

ESL Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Generalist and ESL Supplement certification and work in schools with children in early childhood through 6th grades.

Area of Certification: Generalist (EC-6) with ESL

- EDSL 3322 Foundations of Bilingual Education and ESL
- EDSL 3326 English as a Second Language
- EDSL 4306 Content Area Methods in the ESL Classroom
- EDSL 4308 Assessment in the ESL Classroom
- ENGL 4360 Fundamentals of Language Development
- ENGL 4375 Language Acquisition

a – Special Education – 18 hours (18 advanced)

Special Education Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Generalist and EC-12 Special Education certification and work in schools with children in early childhood through 6th grades.

Area of Certification: Generalist (EC-6) with Special Education (EC-12)

- SPED 3390 Introduction to Exceptional Children
- SPED 4330 Language and Literacy Development of Diverse Exceptional Learners
- SPED 4350 Assessing Exceptional Learners
- SPED 4370 Instructional Methods for Students with Low Incidence Disabilities
- SPED 4380 Instructional Methods for Students with Learning Disabilities
- SPED 4395 Special Education Practicum in Behavior Techniques

3 – Education Support Courses – 12 hours (6 advanced)

EDUC 1301 Introduction to Teaching
- EDFR 2301 Intercultural Context of Schooling
- SPED 4310 Inclusion and Differentiated Instruction in Special Education
- EDSL 3310 Emergent Bilingual Students in Schools
C – TEACHER CERTIFICATION – 24 HOURS (24 advanced)

Choose one:
- EDCI 3331 Human Development and Student Learning
- EPSY 3331 Human Development and Student Learning
- EDCI 3332 Designing and Implementing Instruction and Assessment
- EDCI 3333 Teaching Science to Elementary Students
- EDCI 3334 Teaching Mathematics to Elementary Students
- EDCI 3335 Teaching Social Studies to Elementary Students
- EDCI 3336 Teaching English Language Arts and Reading to Elementary Students
- EDCI 4637 Student Teaching for Elementary Teachers (EC-6)

TOTAL CREDIT HOURS FOR GRADUATION – 126 HOURS

TOTAL ADVANCED HOURS (MINIMUM) – 63 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Progression requirements

For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students.
Degree Type – Bachelor of Interdisciplinary Studies (BIS)
Degree Title – Middle School Mathematics with UTeach Certification (4-8)

Mathematics Majors with Teacher Certification are attractive to the growing demand for teachers in middle schools and elementary schools. A BIS in Middle School Mathematics will prepare the graduate for an exciting and rewarding teaching position and provide the necessary preparation for graduate studies in Mathematics Education.

STUDENT LEARNING OUTCOMES:
1. Demonstrate in-depth knowledge of Mathematics, its scope, application, history, problems, methods, and usefulness to mankind both as a science and as an intellectual discipline.
2. Demonstrate a sound conceptual understanding of Mathematics through the construction of mathematically rigorous and logically correct proofs.
3. Identify, formulate, and analyze real world problems with statistical or mathematical techniques.
4. Utilize technology as an effective tool in investigating, understanding, and applying mathematics.
5. Communicate mathematics effectively to mathematical and non-mathematical audiences in oral, written, and multi-media form.
6. Demonstrate pedagogical content knowledge by successfully completing all state teacher certification requirements.

A – GENERAL EDUCATION CORE – 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

Required
Mathematics – 3 hours
MATH 2412 Pre-Calculus three-hour lecture

Recommended
Social and Behavioral Sciences – 3 hours
Choose from:
- ECON 1301 Introduction to Economics
- ECON 2301 Principles of Macroeconomics

Life and Physical Sciences – 6 hours
- PHYS 2425 Physics for Scientists and Engineers I three-hour lecture
- PHYS 2426 Physics for Scientists and Engineers II three-hour lecture

Integrative and Experiential Learning – 5 hours
- PHYS 2425 Physics for Scientists and Engineers I one-hour lab
- PHYS 2426 Physics for Scientists and Engineers II one-hour lab
Choose one:
- CSCI/CMPE 1370 Engineering Computer Science I (or CSCI/CMPE 1378 Honors)
- CSCI 1380 Computer Science I (or CSCI 1387 Honors)

B – MAJOR REQUIREMENTS – 53 HOURS (42 advanced)

1 – Mathematics Core – 38 hours (33 advanced)
- MATH 2412 Pre-Calculus one-hour lecture
- MATH 2413 Calculus I (or MATH 2487 Honors)
MATE 3301 Fundamentals of Middle School Mathematics
MATE 3302 Fundamentals of Measurement and Geometry I
MATE 3303 Fundamentals of Measurement and Geometry II
MATE 3304 Fundamentals of Algebraic Structures
MATE 3305 Fundamentals of Statistics and Probability
MATE 3306 Middle School Mathematics in a Technological Environment
MATE 3307 Fundamentals of Problem Solving
MATE 3311 Fundamentals of Discrete Mathematics
MATE 3312 Fundamentals of Number Theory
MATE 3313 Fundamentals of Mathematics History
MATE 3314 Fundamentals of Mathematical Structures & Processes

2 – Interdisciplinary Component – 15 hours (9 advanced)
MATH 1350 Fundamentals of Mathematics I
MATH 1351 Fundamentals of Mathematics II
MATE 3317 Perspectives in Mathematics and Science
MATE 3321 Functions and Modeling
MATE 4319 Research Methods in Middle School Mathematics

C – UTEACH CERTIFICATION – 21 HOURS (19 advanced)
Area of Certification: Mathematics (4-8)
UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning Mathematics and Science
UTCH 3302 Classroom Interaction
UTCH 3303 Project-Based Instruction
UTCH 4601 Apprentice Teaching
UTCH 4101 Apprentice Teaching Seminar
READ 4305 Content Area Literacy

D– SUPPORT COURSES – 4 HOURS
Choose 4 hours of Life and Physical Science beyond the core.

TOTAL CREDIT HOURS FOR GRADUATION – 120 HOURS

TOTAL ADVANCED HOURS – 61 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Progression requirements
Admission to the College of Education and P-16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 7 advanced hours, as recommended by advisor.

Graduation requirements
A grade of ‘C’ or better with a GPA of 2.75 or greater is required in all MATH and MATE.