

**Course Information**

<b>Course Title</b>	Introduction Teaching Experiences for STEM Majors
<b>Course Prefix, Num. and Title</b>	CUIN 1101 - Introduction Teaching Experiences for STEM Majors
<b>Division</b>	Technology & Business
<b>Department</b>	Education / Early Childhood
<b>Course Type</b>	Academic General Education Course (from ACGM, but not WCJC Core)
<b>Course Catalog Description</b>	Methods of teaching science and mathematics in schools. Requires students with science or math majors to observe and teach science and math activities in elementary school classrooms.
<b>Pre-Requisites</b>	Meeting Texas Success Initiative (TSI) requirements in Reading, Writing, and Math is required.
<b>Co-Requisites</b>	None

**Semester Credit Hours**

<b>Total Semester Credit Hours (SCH): Lecture Hours:</b>	1:1:0
<b>Lab/Other Hours</b>	
<b>Equated Pay Hours</b>	1
<b>Lab/Other Hours Breakdown: Lab Hours</b>	0
<b>Lab/Other Hours Breakdown: Clinical Hours</b>	0
<b>Lab/Other Hours Breakdown: Practicum Hours</b>	0
<b>Other Hours Breakdown</b>	0

**Approval Signatures**

<b>Title</b>	<b>Signature</b>	<b>Date</b>
<b>Prepared by:</b>		
<b>Department Head:</b>		
<b>Division Chair:</b>		
<b>Dean/VPI:</b>		
<b>Approved by CIR:</b>		

## Additional Course Information

**Topical Outline:** Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

### Course Overview

- Overview of Science and Math Teaching Profession
- Professional demeanor, conduct, and dress
- Professional communication style

### Lesson Plan Models

- Instructional Approaches
- Demonstration lesson and discussion

### Inquiry Instruction

- 5-E Lessons
- Curriculum guides and their use, specifically, Texas Essential Knowledge and Skills (TEKS)
- Expectations for observations and teaching

### Brief Overview of the Elementary Student

- Classroom Management

### In-Class Science Lesson Demonstrations, Practice, and Reflection

### Use of Assessment to Inform Instructional Practices

- Effective questions and forms of assessment
- Aligning student objectives and evaluation items

### Constructing Lesson Plans in Science and Math

### Classroom Management, Routines, and Protocols

### Designing Station Activities in Science and Math

### Culminating activities integrating observation and teaching experiences

### Texas teacher certification requirements for Science and Math teachers K-12

## Course Learning Outcomes:

### **Learning Outcomes – Upon successful completion of this course, students will:**

- 1) Explore teaching as a rewarding career path.
- 2) Observe elementary science/math classes taught by an experienced classroom teacher.
- 3) Deliver two inquiry-based lessons that incorporate TEKS objectives and the “5-E” lesson plan model.
- 4) Distinguish between learner-centered and teacher-centered instructional strategies.
- 5) Interact with diverse student populations in the school setting.
- 6) Exhibit positive expectations for all students (use clear communication; exhibit a pleasant demeanor, show interest in each student, and present accurate content).
- 7) Utilize and discuss technology to collaborate, communicate, and enhance classroom lessons.
- 8) Identify teaching certification requirements.

**Methods of Assessment:**

- 1) Classroom observations, readings, reflections
- 2) Written analyses of science classroom observations
- 3) Two implemented lessons-one plan designed by the instructor and one plan designed by student partners
- 4) Demonstrated science lessons and science discovery stations
- 5) School visits to 4th or 5th grade science class
- 6) Instructor observation visits
- 7) Lesson plan
- 8) Class discussions

**Required text(s), optional text(s) and/or materials to be supplied by the student:**

Students will read and discuss selected articles from Science and Math journals.

**Suggested Course Maximum:**

35

**List any specific or physical requirements beyond a typical classroom required to teach the course.**

Areas for work in small groups.

**Course Requirements/Grading System:** Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

A major portion of this course is the field experience which will consist of 4 school visits (2 observations, and 2 teaching experiences). Students will be assigned to elementary classrooms as pairs to observe, teach, and practice professional demeanor. Attendance at all field experiences is mandatory, and the instructor will coordinate the schedules of the students and the mentor teachers in intermediate grades. Students complete reflections of their observations and teachers using college level writing skills and practice professional communication skills (oral and written).

Class Attendance and Participation = Total 80

- Class Attendance
- Practice Teach 1a and 1b
- Practice Teach 2a and 2b

Field Experiences = Total 90

- Observation 1 Reflection
- Observation 2 Reflection
- Teach 1: Reflection & Mentor Teacher Feedback Form
- Teach 2: Reflection & Mentor Teacher Feedback Form

Course Tasks = Total 45

- Criminal Background Checks, Info Sheet
- "About Me"
- Professional Task Log Check #1
- Professional Task Log Check #2
- Final: "About Me" Reflection

TOTAL = 215 POINTS

## Curriculum Checklist:

**Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.

**Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms

Critical Thinking

Communication

Empirical & Quantitative Skills

Teamwork

Social Responsibility

Personal Responsibility

**WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist