



**TEXAS A&M UNIVERSITY  
SAN ANTONIO**

**EDCI 4347—Math Methods: Elementary  
Department of Curriculum and Instruction**

|                                                                                                                                              |                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Instructor Name:</b><br>Young Rae Kim, Ph.D.                                                                                              | <b>A&amp;M-San Antonio email:</b><br><a href="mailto:YoungRae.Kim@tamusa.edu">YoungRae.Kim@tamusa.edu</a> |
| <b>Office Hours and Location:</b><br>PHEB 214F<br><br>Tuesdays: 4:00 pm – 5:00 pm<br>Wednesdays: 2:15 pm – 4:15 pm<br><br>And by appointment | <b>Course Location &amp; Time:</b><br>PHEB 130<br><br>Section 800<br>Tuesdays 5:30 pm - 8:15 pm           |

**REQUIRED TEXTBOOK:**

- Van de Walle, J. A., Karp, K. S., and Bay-Williams, J. M. (2022). *Elementary and middle school mathematics: Teaching developmentally*, (11<sup>th</sup> Ed.). Pearson.
- Other assigned readings to be posted on Blackboard.

**References:**

- Ball, D. L., Hill, H. C., & Bass, H. (2005). Knowing mathematics for teaching: Who knows mathematics well enough to teach third grade, and how can we decide? *American Educator*, Fall 2005, 14-46.
- Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education*, 59(5), 389-407.
- Butterworth, S., & Cicero, A. M. L. (2001). Storytelling: Building a mathematics curriculum from the culture of the child. *Teaching Children Mathematics*, 7(7), 396-399.
- Cramer, K. A., Monson, D. S., Wyberg, T., Leavitt, S., & Whitney, S. B. (2009). Models for initial decimal ideas. *Teaching Children Mathematics*, 16(2), 106-117.
- Cramer, K., Monson, D., Ahrendt, S., Colum, K., Wiley, B., & Wyberg, T. (2015). 5 Indicators of decimal understandings. *Teaching Children Mathematics*, 22(3), 186-195.
- English, L. D. (2008). Introducing complex systems into the mathematics curriculum. *Teaching Children Mathematics*, 15(1), 38-47.

- Kim, Y. R., & Park, M. S. (2018). Effective teaching for place value understanding: A case study of a literacy-integrated math curriculum module. *Early Years*, 39(1), 19-23.
- Shulman, L. S., (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(4), 4-14.

### **Recommended Course Materials:**

- Computer with Internet access & USB port; Microsoft Word or PDF creator  
– Computers on campus, which contain all of the above may be used
- **Optional:**
  - Bauer, D., Cezeaux, K., and Scott, J. (2016). *Ultimate guide to the TExES core subjects EC-6: The big yellow book*. Ultimate TExES Guide.
  - Rosado, L. A. (2014). *TExES Generalist EC-6*. Research & Education Association.

### **COURSE DESCRIPTION:**

This course provides teacher candidates with methods of teaching and assessing mathematics in the early childhood through elementary grade levels; including methods of selecting and organizing mathematics programs, the sequence of the content of the mathematics curriculum, adapting and enriching mathematics programs to meet the needs of all students, and creating assessments aligned with the mathematics curriculum.

### **MAJOR COURSE COMPONENTS:**

- 1. Standards (NCTM & TEKS Standards)**
- 2. Lesson Planning & Assessments**
- 3. Problem Solving**
- 4. Model-Eliciting Activities (MEAs)**
- 5. Storytelling**
- 6. Number Sense**
- 7. Basic Operations**
- 8. Algorithms**
- 9. Algebraic Reasoning**
- 10. Fractions**
- 11. Decimals**
- 12. Measurement & Geometry**
- 13. Probability & Statistics**
- 14. Exponents, Integers, & Real Numbers**

### **Course Goals/Objectives:**

This course is for future teachers to examine mathematics teaching and develop understandings and pedagogical competencies necessary to implement effective math curriculum in the elementary school classroom. Throughout this course students will collaboratively inquire about teaching and learning, create instructional activities, observe and analyze instruction, and reflect on one's own and each other's teaching.

After completion of this course, the student should meet the following goals, standards, competencies, and requirements:

CO 1: Identify how children think about and learn mathematics

CO 2: Recognize and demonstrate ways to teach mathematics through problem solving with an emphasis on conceptual understanding

CO 3: Be able to differentiate instructions to meet the needs of all students

CO 4: Compare and be able to adapt and enrich various methods and materials appropriate for teaching mathematics to all students

CO 5: Analyze student work and student thinking and identify patterns of student learning and struggles (mathematical errors, confusions, and partial understanding)

CO 6: Relate student work and student thinking to a base for instructions and re-engagement lessons to help students overcome their struggles and develop their conceptual understanding

CO 7: Create instructional activities and learning environments that support and encourage mathematical reasoning, problem solving, and conceptual understanding

CO 8: Design lessons using a student-centered strategy meeting the needs of all students and create assessments aligned with the mathematics curriculum

CO 9: Become confident in teaching mathematics and mathematical ability

## STANDARDS:

### **TAC Requirements for Educator Preparation Programs**

#### ***Educator Preparation Curriculum***

- (c) (4) the skills that educators are required to possess, the responsibilities that educators are required to accept, and the high expectations for students in this state;
- (d) (1) the relevant TEKS, including the English Language Proficiency Standards;

### **TAC Teacher Standards**

**(3) *Standard 3--Content Knowledge and Expertise.*** Teachers exhibit a comprehensive understanding of their content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and their ability to match objectives and activities to relevant state standards.

(A) Teachers understand the major concepts, key themes, multiple perspectives, assumptions, processes of inquiry, structure, and real-world applications of their grade-level and subject-area content.

- (i) Teachers have expertise in how their content vertically and horizontally aligns with the grade-level/subject-area continuum, leading to an integrated curriculum across grade levels and content areas.
- (ii) Teachers identify gaps in students' knowledge of subject matter and communicate with their leaders and colleagues to ensure that these gaps are adequately addressed across grade levels and subject areas.
- (iii) Teachers keep current with developments, new content, new approaches, and changing methods of instructional delivery within their discipline.

(B) Teachers design and execute quality lessons that are consistent with the concepts of their specific discipline, are aligned to state standards, and demonstrate their content expertise.

- (i) Teachers organize curriculum to facilitate student understanding of the subject matter.

- (ii) Teachers understand, actively anticipate, and adapt instruction to address common misunderstandings and preconceptions.
- (iii) Teachers promote literacy and the academic language within the discipline and make discipline-specific language accessible to all learners.
- (C) Teachers demonstrate content-specific pedagogy that meets the needs of diverse learners, utilizing engaging instructional materials to connect prior content knowledge to new learning.
  - (i) Teachers teach both the key content knowledge and the key skills of the discipline.
  - (ii) Teachers make appropriate and authentic connections across disciplines, subjects, and students' real-world experiences.

### **TAC Code 228.57 (a)**

The educator standards adopted by the State Board for Educator Certification (SBEC) shall be the curricular basis for all educator preparation and, for each certificate, address the relevant **Texas Essential Knowledge and Skills (TEKS)**.

### **TAC Code 228.57 (d) (4)**

The skills and competencies as prescribed in Chapter 235 of this title (relating to Classroom Teacher Certification Standards)

### ***TExES Content Standards***

### **TExES Mathematics Generalist EC-6 Standards**

- Standard I.*** *Number Concepts:* The mathematics teacher understands and uses numbers, number systems and their structure, operations and algorithms, quantitative reasoning, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
- Standard II.*** *Patterns and Algebra:* The mathematics teacher understands and uses patterns, relations, functions, algebraic reasoning, analysis, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
- Standard III.*** *Geometry and Measurement:* The mathematics teacher understands and uses geometry, spatial reasoning, measurement concepts and principles, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
- Standard IV.*** *Probability and Statistics:* The mathematics teacher understands and uses probability and statistics, their applications, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.
- Standard V.*** *Mathematical Processes:* The mathematics teacher understands and uses mathematical processes to reason mathematically, to solve mathematical problems, to make mathematical connections within and outside of mathematics, and to communicate mathematically.
- Standard VI.*** *Mathematical Perspectives:* The mathematics teacher understands the historical development of mathematical ideas, the interrelationship between society and mathematics, the structure of mathematics, and the evolving nature of mathematics and mathematical knowledge.
- Standard VII.*** *Mathematical Learning and Instruction:* The mathematics teacher understands how children learn and develop mathematical skills, procedures, and concepts,

knows typical errors students make, and uses this knowledge to plan, organize, and implement instruction; to meet curriculum goals; and to teach all students to understand and use mathematics.

**Standard VIII. Mathematical Assessment:** The mathematics teacher understands assessment and uses a variety of formal and informal assessment techniques appropriate to the learner on an ongoing basis to monitor and guide instruction and to evaluate and report student progress.

**Standard IX. Professional Development:** The mathematics teacher understands mathematics teaching as a profession, knows the value and rewards of being a reflective practitioner, and realizes the importance of making a lifelong commitment to professional growth and development.

### **TExES PPR Standards**

**Standard I.** The teacher designs instruction appropriate for all students that reflects an understanding of relevant content and is based on continuous and appropriate assessment.

**Standard III.** The teacher promotes student learning by providing responsive instruction that makes use of effective communication techniques, instructional strategies that actively engage students in the learning process, and timely, high-quality feedback.

### **TExES Mathematics Test Competencies (802)**

**Competency 001 (Mathematics Instruction).** The teacher understands how students learn mathematical skills and uses that knowledge to plan, organize and implement instruction and assess learning.

**Competency 002 (Number Concepts and Operations).** The teacher understands concepts related to numbers, operations and algorithms and the properties<sup>[1]</sup> of numbers.

**Competency 003 (Patterns and Algebra).** The teacher understands concepts related to patterns, relations, functions and algebraic reasoning.

**Competency 004 (Geometry and Measurement).** The teacher understands concepts and principles of geometry and measurement.

**Competency 005 (Probability and Statistics).** The teacher understands concepts related to probability and statistics and their applications.

**Competency 006 (Mathematical Processes).** The teacher understands mathematical processes and knows how to reason mathematically, solve mathematical problems and make mathematical connections within and outside of mathematics.

## **GRADING POLICIES**

| Assessment                                                            | Accompanying Standard                                                      | Points      |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------|-------------|
| <b>Class Participation &amp; Preparation<br/>(weekly assignments)</b> | Standards I-VIII<br><i>Competencies 001-006</i>                            | 24.5 points |
| <b>Test 1</b>                                                         | Standards I, V, VI, VII, & VIII<br><i>Competencies 001, 002, &amp; 006</i> | 10 points   |
| <b>Test 2</b>                                                         | Standards I-VIII<br><i>Competencies 001-004, &amp; 006</i>                 | 10 points   |

|                                                         |                                                                          |            |
|---------------------------------------------------------|--------------------------------------------------------------------------|------------|
| <b>Article Critique</b>                                 | Standard IX<br>PPR Standard I                                            | 4 points   |
| <b>Reflection Papers</b>                                | Standards V-IX<br>PPR Standards I & III                                  | 8 points   |
| <b>Analyzing Student Work</b>                           | Standards I-VIII<br><i>Competencies 001-006</i><br>PPR Standards I & III | 5 points   |
| <b>Team Planned Lesson</b>                              | Standards I-VIII<br><i>Competencies 003-004</i><br>PPR Standards I & III | 6 points   |
| <b>Curriculum Development: Math Story Book Creation</b> | Standards I-VIII<br><i>Competencies 001-006</i><br>PPR Standards I & III | 8 points   |
| <b>Lesson Plan &amp; Microteaching</b>                  | Standards I-VIII<br><i>Competencies 001-006</i><br>PPR Standards I & III | 16 points  |
| <b>Study Materials &amp; Practice Test #1</b>           | <i>Competencies 001-006</i>                                              | 8.5 points |

Evaluations will be made with numbers. Final course grades of “A” through “F” will be awarded based on the A&M-SA grading Policy (see below):

| <b>Letter Grade</b> | <b>Range</b> | <b>Grade Points</b> |
|---------------------|--------------|---------------------|
| <b>A</b>            | 90-100       | 4.0                 |
| <b>B</b>            | 80-89.9      | 3.0                 |
| <b>C</b>            | 70-79.9      | 2.0                 |
| <b>D</b>            | 60-69.9      | 1.0                 |
| <b>F</b>            | 59.9 & Below | 0.0                 |

### **Grading Scale**

- |                  |                    |
|------------------|--------------------|
| ✓ A 90 or above  | 100-90 points = A  |
| ✓ B < 90% to 80% | 89.9-80 points = B |
| ✓ C < 80% to 70% | 79.9-70 points = C |
| ✓ D < 70% to 60% | 69.9-60 points = D |
| ✓ F < 60%        | 59.9 and below = F |

## ATTENDANCE:

Regular and punctual attendance at all scheduled classes is expected of all students. University regulations authorize absences of students when representing the University (e.g. at athletic, student government, student development, or fine arts events). Other authorized absences are those that may be necessary to fulfill course requirements. Unauthorized absences may be excused when caused by illness or other emergencies and should be reported promptly to the instructor. You may be required to **submit documentation of excused reasons for absence, such as a doctor's note**. Without suitable documentation, all absences, excused or unexcused, will be counted as absences.

You are expected to show up to class on time and once in class to conduct yourself in a professional manner. Class attendance will be checked. It is your responsibility to assure that your presence has been noted.

- Punctuality is expected as part of professional responsibility and courtesy. ***More than 10 minutes late (or leaving early) in a class period is considered a tardy, and 2 tardies equal 1 absence.***
- More than ***one*** absence will result in loss of points for a 1x/week class. ***A two-point reduction in the final grade is incurred for each tardy (or leaving early)*** beyond the one absence for classes meeting 1x/week. In addition, a ***four-point reduction in the final grade is incurred*** for each absence beyond the one absence for classes meeting 1x/week.
- An absence on a presentation or assignment-due day will result in a 30% reduction in the grade for that assignment unless prior arrangements for exceptional circumstances have been made with the instructor.
- Any guests in class, including family members, must be cleared in advance with instructor.

*Note: It is a student's responsibility to make arrangements to complete all course requirements in exceptional circumstances; when the student is hospitalized or involved in a catastrophe.*

## LATE WORK POLICY:

You are responsible for completing all assignments and required readings on time and for obtaining all materials missed as a result of an absence. Assignments will be due at the beginning of each class. You should post assignments to Blackboard before class. **No late assignments will be accepted.** If work cannot be completed on time, make arrangements with the instructor prior to the due date. **There is no make-up work except in the case of emergencies or authorize absences with suitable documentation, such as a doctor's note.**

If you are unable to attend, you must inform me via email and submit all work due in class prior (based on the electronic time stamp) to the beginning of class in order not to be penalized for the absence.

Tests must be completed on the due date to receive full credit. **If a test or a presentation is completed late, 30% will be deducted from the grade.**

## ASSIGNMENT SUBMISSION IN BLACKBOARD:

All assessments must be neatly typed. **The content of tests and assessments will be evaluated based on the level of higher-ordered thinking skills** demonstrated by the student according to the criteria for grading included in this syllabus, Blackboard and the expectations explained in class. **All assessments must be submitted through Blackboard** unless otherwise specified by the instructor.

- All work, except for those expressly listed otherwise, will be submitted electronically through the Blackboard site before the due date.
- All assignments and assessments will be explained throughout the semester and will have corresponding written explanations and descriptions, and/or grading rubrics provided in Blackboard.
- There will be both formative and summative assessments in the course.

### COMMUNICATION SKILLS:

All students must have adequate writing skills in English to communicate content in a professional and concise manner. Students must be proficient in their written presentations including strategies for developing ideas, citing scholarly references, writing style, wording, phrasing, and using language conventions. Students must follow APA guidelines, use non-racist and non-sexist language, and include sufficient references and evidence to support their thesis and ideas in the paper and projects.



**EDCI 4347— Math Methods for EC & Elementary Teachers**  
**Section 800**  
**Tuesdays 5:30 - 8:15 pm**

**COURSE REQUIREMENTS**

Due dates for turning in assignments are established in the course schedule below. You should post assignments to Blackboard before class. **No late assignments will be accepted.** If work cannot be completed on time, make arrangements with the instructor prior to the due date.

**1. Participation & Preparation** (weekly assignments)

You are expected to attend all classes, be on time, and to participate in the class activities. Participation means you come to class with (a) evidence that you read the material before class, (b) the handouts from the class Blackboard site printed out or downloaded on your computer, and (c) the expectation that your voice will be heard in class discussions. Remember you are a future teacher leading a math talk in your classroom everyday!!

This is a reading and writing intensive course. You are expected to read the book chapters and articles designated for each class and to keep current on posting weekly assignments to Blackboard before class. Some of the readings will be discussed explicitly in class, while others will simply be used in the context of our work. Lecture and discussion will expand upon and beyond the readings, and you will be better prepared to profit from class time if you have already completed the readings. In class activities will assume that you have completed the readings.

You will have assignments for each class that will include reading, reflection & quiz, mathematical problems that help you learn to use methodological techniques, tasks related to the core practices of teaching elementary grades mathematics, or small pieces of the major course projects (see below) to help scaffold your work on those projects. For each chapter in the textbook and each article, you will write a reaction to the prompts and/or complete the reading quiz, which will be presented in the weekly assignment pages in Blackboard. Additional readings and assignments may be added on a week-by-week basis.

**2. Test 1 (October 6) & Test 2 (November 10)** – 1 hour in class

The tests will consist of questions and mathematical problems related to classroom activities, readings, and discussions.

**3. Article Critique** (4 points, **Due September 22 Before Class**)

You will write a critique of journal articles dealing with issues related to teaching elementary grades mathematics. The critique must be written in your own words and be **at least two double-spaced word-processed pages in length**. It should consist of a summary of the article and a reflection on the article based on issues presented/discussed in class or encountered in the assignments. Emphasis should be placed on the reflection rather than the summary. The purpose of the assignment is 1) to familiarize you with resources that support a contemporary curriculum; 2) to foster your development of critical thinking; and 3) to evaluate your ability to glean important information from the professional literature (i.e., **“Teaching Children Mathematics”**) and communicate information to another professional via writing. You will also briefly present the information to the class.

**4. Reflection Papers**

At two times during the semester, you will be asked to write **a minimum of a two-page (double-spaced, 12-point font)** personal reflection on your own background in learning mathematics and your changing views of the mathematics as a result of the experiences and readings in the class. The reflection papers must be typed and proofread.

- (1) Personal Reflection Paper (4 points, **Due September 15 Before Class**): The first reflection will describe your experience learning mathematics in school as a child. You will write a reaction to the prompts below.

*Describe what you can remember of your mathematics learning experiences – good and bad. How can your memories help and hinder your development as a math teacher? What do you believe you can do to overcome the hindrances?*

- (2) Final Reflection Paper (4 points, **Due December 8 Midnight**): The second reflection will be based upon class discussions, readings, and class assignments at the conclusion of the semester. You will answer the prompts below.

*How do you feel about yourself as a prospective math teacher? What strengths do you bring? Where will you need to grow? What ideas from this course can you use? How can you teach mathematics to empower all students to learn mathematics deeply?*

### **5. Analyzing Student Work & Re-engagement Strategy (5 points, **Due November 24 Before Class**)**

You will analyze student work and thinking, identifying patterns of student learning and struggles such as mathematical errors, confusions, and partial understanding. Based on your analysis, you will provide feedback on student work and thinking, and plan next steps to help students overcome their struggles and develop their conceptual understanding.

In this project, we assume that you asked your students to create mathematical real-life word problems reflecting situations provided by you and solve the problems independently. Then, you would grade/analyze student work and correct their errors and confusions.

For example, you asked your students to pose a word problem where the answer is  $\frac{1}{2}$ , and you would analyze/grade the problems posed by your students, as well as their problem-solving processes and answers to the problems.

In this project, you will pose a word problem and solve it using ChatGPT, assuming that the problems and problem-solving processes posed and solved by ChatGPT represent your students' outcomes. Then, you will grade/analyze the outcomes from ChatGPT, assuming that they are your students' work.

The provided problem situations are: 1) Task 1- A word problem with the answer of  $\frac{2}{3}$ ; and 2) Task 2: A word problem with the computation of  $\frac{1}{2} + \frac{2}{3}$ . Additionally, Task 3 (optional for extra credit, 2 points) - A word problem with the computation of  $2\frac{1}{3} + \frac{1}{2}$ .

### **6. Team Planned Lesson (6 points, **Times will vary**)**

You will work in teams of 3 to 4 students to develop a lesson based on a Texas Essential Knowledge and Skills [TEKS] elementary grades mathematics standard(s). Each team will be assigned a chapter from the textbook and a mathematical topic (e.g., Chapter 16 – Fraction Operations: Addition) and will plan a lesson on the math content from the assigned topic (e.g., math content regarding Fraction Operations: Addition). The lesson must include at least one

motivational activity as well as some form of assessment and should be designed to last **approximately 10-12 minutes. Your team will present the lesson to the class as if the class was the elementary school class for which the lesson was designed.** A lesson plan format will be provided.

**Note:** Each team member should individually post a word-processed question sheet for the discussion and lesson plan to Blackboard before class. Also each individual in the team will respond to the questions below.

*What was my contribution to the team?*

*How well did our team work together?*

Team Planned Lesson Dates (to be assigned)

| Date | Topics |
|------|--------|
|      |        |

## 7. Curriculum Development

You will work in teams of 2 to 3 students to complete one curriculum development activity. **You will be given a list of math topics that your Math Story Book will focus on.** Highlight one topic from the list provided and address at least one Texas Essential Knowledge and Skills [TEKS] elementary grades mathematics standard for the assignment.

Math Story Book Creation (8 points, **Due October 13 Before Class**): Based on the great powers of stories, storytelling has been considered as an effective way of enhancing the teaching and learning of mathematics. You will have class time to engage in several books of children's literature with themes that readily extend themselves to mathematical ideas. You will also have class time to work on writing a story line of your own math storybook in a team. You will choose only one topic from the list provided and your math storybook will be aligned to at least one TEKS elementary grades mathematics standard. A bilingual (English and Spanish) book will be a great idea. More information will be provided throughout the course.

**Note:** Each team member should individually post the parts of the team-based assignment to Blackboard **before class**. Also each individual in the team will respond to the questions below.

*What was my contribution to the team?*

*How well did our team work together?*

## 8. Lesson Plan & Microteaching (16 points in total, **Times will vary**)

**(1) Lesson Plan:** Students will develop a lesson based on a Texas Essential Knowledge and Skills [TEKS] elementary grades mathematics standard(s). The lesson must include a motivational activity as well as some form of assessment and should be designed to last approximately 10-12 minutes. A lesson plan format will be provided. You should post a word-processed lesson plan to Blackboard before class.

**(2) Microteaching:** Each student will present the lesson to the class as if the class was the elementary school class for which the lesson was designed. Your teaching will be video recorded for assessment. The recording will be kept confidential; I will be the only person (in-person class, not online class) who sees the recording, and it will be discarded after assessment.

**(3) Final Lesson Plan (Due December 1 Midnight):** After you complete your microteaching you are to write a reflection statement to reflect on your experience. A set of questions to prompt reflection will be provided. You should post a revised lesson plan (highlight changes) with the reflection to Blackboard before the due date.

## COURSE CALENDAR

| Week | Date               | Topic                                                                                     | Readings                                                                                                           | *Assignment(s) Due:<br><b>Tuesday Before Class</b>                                                                         |
|------|--------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| 1    | August 25          | Introductions & Standards                                                                 | Optional reading: Ball et al. (2008)                                                                               | Syllabus Acknowledge (T)<br>240 Tutoring Study Guides (Check #1- Sept. 18)                                                 |
| 2    | September 1        | Lesson Theories & Lesson Planning                                                         | Chapter 1                                                                                                          | <b>TEKS Scavenger Hunt (T)</b><br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #1- Sept. 18)                       |
| 3    | September 8        | Lesson Planning, Assessments & Problem Solving                                            | Chapter 2<br>Chapter 4                                                                                             | Reading Quiz (T)<br>240 Tutoring Study Guides (Check #1- Sept. 18)                                                         |
| 4    | September 15       | Problem Solving, Model-Eliciting Activities (MEAs) Storytelling I                         | Chapter 5<br>Chapter 3<br>Optional readings:<br>English (2008)<br>Kim & Park (2018)<br>Butterworth & Cicero (2001) | <b>Personal Reflection Paper (T)</b><br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #1- Sept. 18)                 |
| 5    | September 22       | Storytelling II<br>Number Sense                                                           | Chapters 7 & 10                                                                                                    | <b>Article Critique (T)</b><br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #2- Oct. 23)                           |
| 6    | September 29       | Number Sense<br>Basic Operations (CGI)                                                    | Chapters 8, 11, & 12                                                                                               | Reading Quiz (T)<br>240 Tutoring Study Guides (Check #2- Oct. 23)                                                          |
| 7    | <b>October 6</b>   | <b>Test 1</b><br>Basic Operations (CGI)<br>Algorithms (+, -, x, ÷)<br>Algebraic Reasoning |                                                                                                                    | <b>Test 1</b>                                                                                                              |
| 8    | October 13         | Algorithms (+, -, x, ÷)<br>Algebraic Reasoning                                            | Chapter 13<br>Optional reading: Ball et al. (2005)                                                                 | <b>Math Story Book Creation (T)</b><br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #2- Oct. 23)                   |
| 9    | October 20         | Algebraic Reasoning<br>Fractions                                                          | Chapters 14 & 15                                                                                                   | Team Planned Lesson (Monday Midnight)<br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #2- Oct. 23)                 |
| 10   | October 27         | Fractions & Decimals                                                                      | Chapters 16 & 17<br>Optional reading: Cramer et al. (2015)                                                         | Team Planned Lesson (Monday Midnight)<br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #3- Nov. 24)                 |
| 11   | November 3         | Fractions & Decimals<br>Measurement & Geometry I                                          | Chapters 18 & 19                                                                                                   | Team Planned Lesson (Monday Midnight)<br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #3- Nov. 24)                 |
| 12   | <b>November 10</b> | <b>Test 2</b><br>Measurement & Geometry I & II                                            |                                                                                                                    | <b>Test 2</b>                                                                                                              |
| 13   | November 17        | <b>Microteaching</b><br>Measurement & Geometry II<br>Statistics & Probability             | Chapters 20 & 21                                                                                                   | <b>Lesson Plan (Monday Midnight)</b><br>Reading Quiz (T)<br>240 Tutoring Study Guides (Check #3- Nov. 24)                  |
| 14   | November 24        | <b>Microteaching</b><br>Statistics & Probability<br>Exponents, Integers, & Real Numbers   |                                                                                                                    | <b>Lesson Plan (Monday Midnight)</b><br><b>Analyzing Student Work (T)</b><br>240 Tutoring Study Guides (Check #3- Nov. 24) |
| 15   | December 1         | <b>Microteaching</b><br>Statistics & Probability<br>Exponents, Integers, & Real Numbers   | Chapters 22                                                                                                        | <b>Lesson Plan (Monday Midnight)</b><br>Reading Quiz (T)                                                                   |
| 16   | Final Exam         | <i>Time at home to complete the final projects</i>                                        |                                                                                                                    | <b>Final Lesson Plan</b><br><b>Final Reflection Paper</b><br><b>240 Practice Test</b><br>Due Tuesday, December 8 Midnight  |

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**Section 800**  
**Tuesdays 5:30 pm - 8:15 pm**

**TEXAS A&M UNIVERSITY–SAN ANTONIO POLICIES**

**University Email Policy and Course Communications:** All correspondence between professors and students must occur via university email accounts. You must have your Jaguar email account ready and working. If it is not working, contact the help desk at [helpdesk@tamusa.edu](mailto:helpdesk@tamusa.edu) or at 210-784-HELP (4357). If you don't hear back within 48 hours, contact them again. They have many requests during the first part of the semester, so you may need to follow up with them.

**Academic Accommodations for Individuals with Disabilities:** Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us at the [website](#) or email us at [dss@tamusa.edu](mailto:dss@tamusa.edu). All students are encouraged to discuss their academic accommodation with Disability Support Services and their instructors as soon as possible.

**Academic Learning Center:** All currently enrolled students at Texas A&M University-San Antonio can utilize the Academic Learning Center for subject-area tutoring. The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing [tutoring@tamusa.edu](mailto:tutoring@tamusa.edu), calling (210) 784-1307, or visiting the Central Academic Building, room 202. Online tutoring is also available for after hours and weekend assistance.

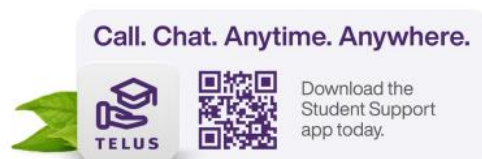
While tutoring hours may change based on tutor schedules and availability, the current tutoring hours for MATH in the ALC are as follows:

|           | <b>Appointments<br/>available</b> | <b>Walk in Tutoring – No appointment<br/>needed</b> |
|-----------|-----------------------------------|-----------------------------------------------------|
| MONDAY    | 8 am – 6 pm                       | 9 am – 5 pm                                         |
| TUESDAY   | 8 am – 6 pm                       | 9 am – 5 pm                                         |
| WEDNESDAY | 8 am – 6 pm                       | 9 am – 5 pm                                         |
| THURSDAY  | 8 am – 6 pm                       | 9 am – 5 pm                                         |
| FRIDAY    | 8 am – 5 pm                       | 11 am – 4 pm                                        |

**Counseling/Mental Health Resources:** As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, visit our website, call 210-784-1331 or visit Madla 120 between the hours of 8:00 AM and 5:00 PM.

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. *Crisis support is available 24/7/365 by calling the SCC at 210-784-1331 or through the TELUS student support App.*

The TELUS Student Support App provides a variety of mental health resources to including 24/7/365 support for in the moment distress, crisis support, an anonymous peer-to-peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.



**Emergency Preparedness:** JagE Alert is Texas A&M University-San Antonio's mass notification system. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: <https://tamusa.bbcportal.com/>. More information on emergency response may be found at: [Emergency Operations Plan](#) and the [Emergency Action Plan](#). Download the SafeZone App (<https://safezoneapp.com/>) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

**Financial Aid and Verification of Attendance:** According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended by the published Census Date (the first week of class). Any student receiving federal financial aid who does not attend prior to the published Census Date (the first week of class) will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

**Jaguar Writing, Language, and Digital Composing Center (WLDCC):** The WLDCC provides support to graduate and undergraduate students in all three colleges as well as faculty and staff. Writing tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. The WLDCC offers face-to-face, synchronous online, and asynchronous digital appointments. Students can schedule appointments with the WLDCC in JagWire under the Student Services tab. Click on "Writing, Language, and Digital Composing Center" to make your appointment. Students wanting to work in realtime with a tutor can schedule an "Online Appointment." Students wishing to receive asynchronous, written feedback from a tutor can schedule an "eTutoring" appointment. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our [website](#). The WLDCC can also be reached by emailing [wldcc@tamusa.edu](mailto:wldcc@tamusa.edu).

**Meeting Basic Needs:** Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a [CARE report](#) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources. A food pantry is available on campus; click [here](#) for hours and contact information.

**Military Affairs:** Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots' Casa building, room 202, or to contact the Office of Military Affairs with any questions at [military.va@tamusa.edu](mailto:military.va@tamusa.edu) or (210)784-1397.



**Religious Observances:** Texas A&M University-San Antonio recognizes the wide variety of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

**The Six-Drop Rule:** Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

**Statement of Harassment and Discrimination:** Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual on our campus and within our state, nation, and world. All decisions and actions involving students and employees are to be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the University's Civil Rights Officer at 210-784-2061 or [titleix@tamusa.edu](mailto:titleix@tamusa.edu).

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking based on sex, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related sex-based misconduct, the faculty member must share that information with the university's Title IX Coordinator ([titleix@tamusa.edu](mailto:titleix@tamusa.edu), 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

**Pregnant/Parenting Students:** Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide such reasonable accommodations to pregnant students as would be provided to a student with a temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status ([titleix@tamusa.edu](mailto:titleix@tamusa.edu); 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

**Young Jaguars** can support parenting students with daycare if students meet this criteria: (1) must be enrolled in classes at Texas A&M-San Antonio in the current semester, (2) must be Pell eligible or a single parent, (3) child(ren) must be aged 3 to 12-years-old, and (4) child(ren) must be enrolled in Pre-K-3 through 6th grade. Hours of operation is Monday-Thursday 3:30pm-9:00pm. For more information, please contact Young Jaguars at [youngjaguars@tamusa.edu](mailto:youngjaguars@tamusa.edu) or call (210) 784-2636.

**Students' Rights and Responsibilities:** The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

#### **Students' Rights**

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

#### **Students' Responsibilities**

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, [Student Code of Conduct](#), on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, or disability. Conduct that infringes on the rights of another individual will not be tolerated.



Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the [Student Code of Conduct](#) or visit the resources available in the [OSRR website](#)

Important Fall 2026 Dates:

| Dates                   | Event                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------|
| August 20               | Tuition & Fee Payments deadline                                                                                |
| August 24               | First day of class                                                                                             |
| September 7             | Labor Day Holiday - No Classes / University Closed                                                             |
| September 9             | Census date– Students not paid in full or enrolled in a payment plan by 4:59 pm may be dropped for non-payment |
| October 5-October 16    | Midterm grading period                                                                                         |
| November 13             | Last day to drop with an automatic “W”                                                                         |
| November 25             | Study Day – No classes                                                                                         |
| November 26-November 28 | Thanksgiving Holiday - No Classes / University Closed                                                          |
| November 30             | Last day to drop a course or withdraw from the University                                                      |
| December 4              | Last day of classes                                                                                            |
| December 5-December 11  | Final exams                                                                                                    |
| December 11             | End of term                                                                                                    |
| December 15             | Commencement                                                                                                   |

The complete [academic calendar](#) is available online

**Use of Generative AI Permitted Under Some Circumstances or With Explicit Permission**

There are situations and contexts within this course where you may be asked to use artificial intelligence (AI) tools to explore how they can be used. Outside of those circumstances, you should not use AI tools to generate content (text, video, audio, images) that will end up in any student work (assignments, activities, discussion responses, etc.) that is part of your evaluation in this course. Any student work submitted using AI tools should clearly indicate with attribution what work is the student’s work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, students should reach out to their instructor for clarification before submitting work for grading. Use of AI-generated content without the instructor’s permission and/or proper attribution in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio’s standards of academic integrity.