



## *ECED 4311-002 Teaching Mathematics in Early and Elementary Education*

*Fall 2015*

### Instructor Information:

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<b>Office Hrs:</b>	Monday	Tuesday
(Based on Appointment)	Noon-2:00	2:00-4:00

<b>Instructor's Web Site &amp; Courseware:</b>	<a href="http://www.uta.edu/profiles/Joo-Lee">http://www.uta.edu/profiles/Joo-Lee</a> UT Arlington Blackboard, TK 20
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### Course Information:

<b>Course Title:</b>	Teaching Mathematics in Early and Elementary Education
<b>Course Number:</b>	ECED 4311-002
<b>Semester:</b>	Fall 2015
<b>Course Location and Time:</b>	TH 115 & Mondays, 4:30 P.M.-7:20 P.M.

### Catalog Description

NCTM's 6 principles to implement high quality mathematics in early and elementary education; Emphasis on developing and promoting children's mathematical process skills (problem solving, reasoning & proof, representation, connection, and communication) and content knowledge (number & operations, algebra, geometry, measurement, and data analysis & probability); Development math lesson plans in a developmentally appropriate manner including appropriate objectives, materials, activities, assessment, and lesson modifications. Course will also address the instructional needs and appropriate assessment of all students in inclusive, multicultural & multilingual, and ESL classrooms for this content area. Field-based experiences required - One full day per week on elementary campus.) Prerequisite: EDUC 4316, ELED 4313, 4317, 4321, EDTC 4301 and BEEP 4306. Taken concurrently with ELED 4312, ELED 4314 and BEEP 4384.

### Course Prerequisites:

This course should be taken concurrently with ECED 4312, and ECED 4314. Students will be assigned for 1 day in an approved setting for the practicum portions of these courses (Internship).

## Learning Outcomes

This course was developed to help EC-6 teacher candidates understand developmentally appropriate practice in teaching mathematics. By completing this course, expected learning outcomes are as follows:

- Being able to identify and implement effective teaching strategies that contribute to constructivist teaching practices.
- Being able to effectively promote children's problem solving skills and mathematical reasoning.
- Being able to design, develop, and implement mathematics lessons for young children based on their needs aligned with standard requirements (National & State).
- Being able to identify mathematics content expected for children at specific grade level(s).
- Being able to design and implement a rich math environment that promotes children's mathematics concepts.

## Textbook(s) and Materials:

### Major Textbook

- Fierro, R.D. (2013). *Mathematics for elementary school teachers*. CA: Belmont, Brooks/Cole, Cengage Learning.

### Supplemental Resources

- Lee, J. (2015). *How to teach math to children: A standards-based guide (1<sup>st</sup> Edition)*, CA: San Diego, Cognella Academic Publishing.
- Texas Higher Education Coordinating Board., & Texas Education Agency. (2009). *College and Career Readiness Standards (CCRS)*. Available on the Web: <http://www.theccb.state.tx.us/collegereadiness/crs.pdf>
- National Council of Teachers of Mathematics. (2000). *Principles and Standards for School Mathematics*. Available from <http://www.nctm.org/Standards-and-Positions/Principles-and-Standards/Principles,-Standards,-and-Expectations/>
- Texas Education Agency. (2010). *Texas Essential Knowledge and Skills (TEKS) for pre K through Grade 6*. Available from [http://tea.texas.gov/Student\\_Testing\\_and\\_Accountability/Testing/State\\_of\\_Texas\\_Assessments\\_of\\_Academic\\_Readiness\\_%28STAAR%29/STAAR\\_Released\\_Test\\_Questions/](http://tea.texas.gov/Student_Testing_and_Accountability/Testing/State_of_Texas_Assessments_of_Academic_Readiness_%28STAAR%29/STAAR_Released_Test_Questions/)
- E-reading materials will be provided if necessary.
- The College of Education and Health Professions is pleased to announce the adoption of **TK20**, a comprehensive data management system that will provide us with powerful tools to manage our growth and streamline our processes to enable us to meet your needs more efficiently and effectively. As with other course materials, you will need to subscribe to the program for a one-time only, non-refundable cost of \$100. You may purchase your subscription online from a link provided on the system's Web site or from the UT Arlington Bookstore as you would a textbook or other course materials. Please see the letter from Dean Gerlach and visit <http://www.uta.edu/coehp/tk20> for more information.

## State Guidelines, Competencies and Professional Organizations

### State Guidelines, Competencies and Professional Organizations

- NCTM: [www.nctm.org](http://www.nctm.org)
- ACEI: [www.acei.org](http://www.acei.org)
- TEKS: <http://ritter.tea.state.tx.us/rules/tac/chapter111/index.html>
- CCRS: <http://www.theccb.state.tx.us/collegereadiness/crs.pdf>
- STARR: <http://www.tea.state.tx.us/student.assessment/staar/> - STAAR (The State of Texas Assessments of Academic Readiness)
- ESL EC 6 Generalist Manual:

### University Mission:

The mission of The University of Texas at Arlington is to pursue knowledge, truth and excellence in a student-centered academic community characterized by shared values, unity of purpose, diversity of opinion, mutual respect and social responsibility. The University is committed to lifelong learning through its academic and continuing education programs, to discovering new knowledge through research and to enhancing its position as a comprehensive educational institution with bachelor's, master's, doctoral and non-degree continuing education programs.

### College(COE) Conceptual Framework



The conceptual framework of the UT Arlington College of Education was developed collaboratively and has evolved over time. Following the identification of a set of core values held by all involved in the preparation of candidates enrolled in the College, members of the University, PK-12 districts, higher education institutions, and area business and foundation communities worked together to develop a shared vision for education.

All activities in the College are guided by the premise that we are Partners for the Future, committed to fostering critical, creative thinkers prepared to engage meaningfully in a dynamic society. This premise is characterized and distinguished by three core values: Professionalism, Knowledge, and Leadership. Research, Diversity, and Technology are themes woven throughout each core value. The College mission, core values, and themes serve as the coherent thread running through all professional programs, guiding the systematic design and delivery of clinical/field experiences, course curricula, assessments, and evaluation. The Conceptual Framework consists of six interrelated and interacting components, which are viewed as essential contexts for the shaping of informed, skilled, and responsible partners:

- The first core value, **Professionalism**, represents the contention that candidates develop an expertise and specialized knowledge of their field. A high quality of work, standard of professional ethics and behaviors, as well as work morale and motivation are all necessary factors of a developed interest and desire to excel in job performance.
- The second core value, **Knowledge**, represents candidate theoretical or practical understanding of a subject. In today's world, candidate knowledge includes not only academic content mastery, but also skills such as critical thinking, communication, technology literacy, and collaboration, each required for success in college, life, and career.
- The third core value, **Leadership**, represents candidate ability to organize, assist, and support others in the achievement of a common task. Candidates develop and refine their leadership skills within the

context of their interactions with PK-20 students, curricula, faculty, and other professionals. The additional three components of the model, Research, Diversity, and Technology, represent themes woven into the core values:

- **Research** encompasses the investigation of ideas and theories with the purpose of discovering, interpreting, and developing new systems, methods, and support for knowledge, behaviors, and attitudes.
- **Diversity** is an indispensable component of academic excellence. A commitment to diversity means a dedication to the inclusion, welcome, and support of individuals from all groups, encompassing the various characteristics of persons in our community such as race, ethnicity, national origin, gender, age, socioeconomic background, religion, sexual orientation, and disability.
- **Technology** is emphasized throughout all programs and is used to support and improve content delivery and student learning.

All components lead to the achievement of one goal—the development of informed and responsible Partners for the Future—who are committed to fostering analytical, innovative thinkers prepared to engage meaningfully in a dynamic society

### Standard Alignment

#### National Standards:

**ACEI (NCATE SPA) Curriculum 2.3 Mathematics** Candidates know, understand, and use the major concepts and procedures that define number and operations, algebra, geometry, measurement, and data analysis and probability. In doing so they consistently engage problem solving, reasoning and proof, communication, connections, and representation.

**NCTM Math Standards** Check out the following link for both content and process standards of mathematics.  
<http://www.nctm.org/Standards-and-Positions/Principles-and-Standards/Principles,-Standards,-and-Expectations/>

#### State Standards

##### TX Generalist ESL EC-6 Mathematics 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.

<b>Standard IV. Probability and Statistics</b>	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.
<b>Standard V. Mathematical Processes:</b>	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.
<b>Standard VI. Mathematical Perspectives</b>	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.
<b>Standard VII. Mathematical Learning and Instruction</b>	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.
<b>Standard VIII. Mathematical Assessment:</b>	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.
<b>Standard IX. Professional Development:</b>	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.

### **Texas College and Career Readiness Standards (CCRS)**

See the pages 7 through 11 for Texas CCRS content standards of Math.

<http://www.theccb.state.tx.us/index.cfm?objectid=EAE69736-B39D-F3FF-EA777519F1F0348B>

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### **General University Policies**

#### **Expectations for Out-of-Class Study:**

Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 6 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

#### **Grade Grievances:**

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate / graduate catalog.

[http://www.uta.edu/catalog/content/general/academic\\_regulations.aspx#10](http://www.uta.edu/catalog/content/general/academic_regulations.aspx#10)

#### **Drop Policy**

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the

term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/ses/fao>).

### **Americans with Disabilities Act**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

### **Title IX**

The University of Texas at Arlington is committed to upholding U.S. Federal Law "Title IX" such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit [www.uta.edu/titleIX](http://www.uta.edu/titleIX).

### **Academic Integrity**

All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

Academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form at The University of Texas at Arlington. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. "Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2., Subdivision 3.22).

### **Electronic Communication**

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

### **Student Support Services**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at



University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**The English Writing Center (411LIBR):** Hours are 9 am to 8 pm Mondays-Thursdays, 9 am to 3 pm Fridays and Noon to 5 pm Saturdays and Sundays. Walk In *Quick Hits* sessions during all open hours Mon-Thurs. Register and make appointments online at <http://uta.mywconline.com>. Classroom Visits, Workshops, and advanced services for graduate students and faculty are also available. Please see [www.uta.edu/owl](http://www.uta.edu/owl) for detailed information.

#### **Student Feedback Survey:**

At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

#### **Final Review Week**

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

#### **Emergency Exit Procedures:**

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located the front and back doors of the classroom. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

#### **Incomplete Work:**

In the case of incomplete work, a grade of “I” can be awarded only in the event of serious circumstances that prevent completing all work.

#### **Medical Reimbursement:**

University students will be responsible for their own transportation, meals, and health care while participating in the field-based program.

- University students bear the burden of any expenses incurred in conjunction with injuries that may occur during field based classes/components, internship, and residency.
- The University will not reimburse the student for any expenses related to injuries or illness.

**Emergency Phone Numbers:** In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911.

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## Departmental Policies

### **Commitment to Diversity:**

In our commitment to furthering of knowledge and fulfilling our educational mission, the College of Education at UTA seeks a campus climate that welcomes, celebrates, and promotes respect for the entire variety of human experience.

- In our commitment to diversity, we welcome people from all backgrounds.
- We seek to include knowledge and values from many cultures in the curriculum.
- Dimensions of diversity shall include, but are not limited to the following: race, ethnicity, religious belief, sexual orientation, sex/gender, disability, economic status, cultural orientation, national origin and age.

### **General Policies:**

- The professor is available for telephone, e-mail or face-to-face conferences as the need arises. **It is your responsibility to solicit help from the instructor.** This s to be done *before* problems affect your grade – not after.
- The professor reserves the right to make changes in the syllabus as deemed necessary. Students will be notified of any changes.
- All borrowed material must be returned before a final grade will be reported to the university.
- Conduct yourself professionally and ethically as described by the Texas Administrative Code – Educator’s Code of Ethics
- **Do not underestimate the importance of the above requirements.** Earning a grade of “A” for this course requires more than earning “A’s” on all assignments; it additionally requires a demonstration of professional behaviors.
- Courses are for persons registered in the class. Visitors and **children are not permitted in class.** You are responsible for finding appropriate child care.

### **Communications:**

- UTA is the official mode of communication for UTA.
- For questions related to the course requirements, assignments, or exams post your questions on the course Q & A Discussion Board on Blackboard.
- For questions related to grades or other questions that are personal in nature, please use the email function within Blackboard. This will come directly to my UTA email account.
- During the week you will receive a response within 24 hours from your instructor. On the weekends, expect to wait 48 hours for a response.
- All official course information and announcements will be posted on the announcement page in Blackboard.
- For questions related to using Blackboard, review the tutorial, look on the Student Resources Page or email the Help Desk at [helpdesk@uta.edu](mailto:helpdesk@uta.edu).

### **Electronic Devices:**

- As a courtesy to your instructor and your classmates, please silence electronic devices such as cell phones, computers and pagers.
- Texting will not be tolerated.
- Cell phones should be on ‘silent’ and vibrating feature should be turned off. A vibrating phone on a desk makes noise.
- Non-course related Internet surfing will not be tolerated
- Internet use is strictly limited to class discussions.

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**Attendance:**

- Candidates who miss more than **one** class meeting will have their final grade dropped by one letter. Each absence thereafter will also reduce the final grade by one letter (i.e. 3 absences will drop the final grade 2 letters).
- Three tardies (or leaving the class before class is concluded or a combination thereof) will equal one absence.
- Class begins promptly at the designated start time and ends when dismissed by the instructor.
- Attendance is a strong indication of your commitment and professionalism; therefore, attendance will be taken and absences will be seriously considered when assigning final grades. You are expected to be on time and remain engaged during the entire class.
- *It is your responsibility to sign in* before leaving class. If you leave class and did not sign in, you may not e-mail or phone to confirm your attendance. If you do not sign in, you will be counted absent.

**Preparation:**

- In order for you to maximize the learning opportunities available on and off-campus, it is necessary that you come prepared, including having read and reflected on the required readings for each and every class. Reading assignments are important and enable students to examine beliefs, explore theories, and debate ideas with fellow students and instructor.

**Participation:**

Class participation includes but is not limited to:

- Being prepared for class (reading all assignments and having assignments ready to turn in at the beginning of class. Lack of participation gives the appearance of lack of interest and/or preparation.
- Participating in discussions both whole class and small group
- Being mentally engaged in the class lectures as well as discussions. With this requirement, students who choose to use laptop computers in class are to use them for taking notes of lecture and discussion(s).
- Answering e-mail, “surfing the web”, working on assignments for other classes on laptops during class does not demonstrate appropriate participation effort and participation grade may be affected.
- “Texting” is not appropriate during class. Your participation grade will be affected if you choose to “text” during class.
- One way we show respect is to not talk while others (the professor or fellow students) are talking. If you have difficulty demonstrating respect to the class members, your participation grade will be affected. This includes talking during demonstrations, presentations, or videos. You are expected to add depth to discussions at each meeting at the appropriate time.
- You have chosen a profession that requires a commitment to timeliness, responsibility, cooperation, teamwork, prior planning, above average writing and speaking skills, and an attitude of respect for learners with different needs, colleagues and mentors.
- Due to liability issues, consideration for other students, and developmental appropriateness, visitors and children are not permitted in class. (Guest speakers are an exception.)

**Assignments and Assessments:**

- All assignments should be submitted via the Blackboard course webpage.
- All assignments should be submitted with the designated title of the assignment.
- All assignments should be submitted using APA formatting guidelines and a cover sheet including the following:  
Student's Name  
Assignment Name  
University of Texas at Arlington  
Dr. Joohi Lee (Professor's name)  
Date  
Academic Honesty Statement (below)
- Teachers must speak and write effectively; therefore, all written assignments must be in good form. Check your spelling and proofread. Points will be deducted for inappropriate content and form. As

teachers, we encourage students to edit the work of classmates prior to submitting for a grade.

- Assignments submitted after the designated date and time are considered late. The instructor will deduct 10% of the value of the assignment for each day it is late.
- All assignments are due before the scheduled final examination for the course. Assignments submitted during or after the final examination will not be graded or considered in the final course grade.
- Candidates are required to attach and sign the program academic integrity statement with each assignment submitted for a course requirement.
- The university's final exam schedule is available on the university web-site prior to the beginning of the academic year. Candidates are required to take the final examination for this course on the scheduled date and time.

#### Grades and Learning:

- No extra credit work will be given.
- Because learning is important you may be asked to reconsider and/or amend assignments completed that do not demonstrate an effective level of growth on your part.
- You will not be allowed to resubmit work that earned a low grade because the directions were not followed.

#### Concerns:

- Should problems or concerns arise, it is your responsibility to solicit help.
- This is to be done before problems affect your grade – not after.

#### Video Recording

- Students may record the lecture in auditory form and make notes from the recordings for their personal use only. Many cell phones have video capability but video recording is not permitted as the professor and students have not given express written consent to be videoed. (Anyone appearing in such a video would have to give written consent to having her/his image displayed in any manner.) Students may not transmit, copy, or reproduce recordings in any format or share recordings or transcriptions with others.

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#### Academic Honesty Statement:

The following statement is to be included on the cover page of each written assignment submitted for credit in all ELED course. For assignments submitted electronically, the candidate's name may be word-processed on the signature line. The posting of the statement with the candidate's name through the candidate's email, Blackboard, or TK-20 account is recognized as the candidate's signature.

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**On my honor, I have neither given nor received aid on this assignment. I acknowledge that misrepresenting another's work as my own is a violation of the UTA Academic Integrity Policy.**

**I have not submitted the attached work as an assignment for any other course or field activity.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Tentative lecture/topic schedule:**

*“Students who enter college having mastered these standards are likely to be successful in entry-level college mathematics courses and to be prepared for courses in related disciplines that require mathematical proficiency” (Texas College and Career Readiness, 2009, p. 8).*



Date	Topic	Readings	Assignments
Aug 31	Course Orientation Expectations		
Sep 7	<b>Labor Day Holiday (No Class)</b>		
Sep 14	Tagging the textbook National, State, and CCRS What to teach and how to Teach (Standards-based) Chapter 1 Problem Solving and Reasoning	Chapter 1	Bring your textbook, the copies or e-copies of National, State, and CCRS to the class <b>Content Test Chapter 1</b>
Sep 21	Developing number sense Chapter 2 Sets, Numeration, and Addition, and Subtraction with Whole Number	Chapter 2	<b>Content Test Chapter 2</b>
Sep 28	Developing number sense Chapter 3 Multiplication and Division with Whole Number	Chapter 3	<b>Content Test Chapter 3</b>
Oct 5	Developing Number Sense Chapter 4 Elementary Number Theory and Integers	Chapter 4	<b>Content Test Chapter 4</b>
Oct 12	Developing Number Sense Chapter 5 Rational Numbers and Fractions	Chapter 5	<b>Content Test Chapter 5</b> Lesson Plan Due
Oct 19	Developing Number Sense Chapter 6 Decimals, Real Numbers, and Percent	Chapter 6	<b>Content Test Chapter 6</b>
Oct 26	Promoting children's algebraic reasoning Chapter 7 Algebra and Functions	Chapter 7	<b>Content Test Chapter 7</b>
Nov 2	Data Analysis and Probability for Children Chapter 8 Descriptive Statistics	Chapter 8	<b>Content Test Chapter 8</b> Math Home Kit Due & Presentation
Nov 9	Data Analysis and Probability for Children Chapter 9 Probability	Chapter 9	<b>Content Test Chapter 9</b>
Nov 16	Teaching Children Geometry Chapter 10 Instruction to Geometry	Chapter 10	<b>Content Test Chapter 10</b>
Nov 23	Measurement for Children Chapter 11	Chapter 11	<b>Content Test Chapter 11</b>

	<b>Measurement</b> <b>Thanksgiving Week</b>		
Nov 30	<b>Geometric Reasoning</b> <b>Chapter 12 Triangles and Quadrilaterals</b> <b>Chapter 13 Coordinate Geometry and Plane Transformations</b>	<b>Chapter 12</b> <b>Chapter 13</b>	<b>Content Test Chapter 12</b> <b>Content Test Chapter 13</b> <b>Lesson Plan Post-Reflection &amp; Observation Due</b>
Dec 7	<b>Dead Week</b> <b>Review for the Final Exam if necessary</b>		
Dec 14	<b>Final Week</b>		<b>Final Exam on BB</b>

*Note. As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. Dr. Joohi Lee*

Assignments:

Assignments	ACEI	TEExES
<ul style="list-style-type: none"> <li><b>Math Home Kit (20 pts)</b> 2 or more games or interactive activities along with directions Math children's book <b>Presentation (5pts)</b></li> </ul>	2.3	I, II, III, IV, V, VI, VII, VIII, IX
<ul style="list-style-type: none"> <li><b>Individual Mathematics Lesson Plan Project (25pts)</b> <ul style="list-style-type: none"> <li>Mathematics Lesson Plan; 20 pts</li> <li>Post-reflection; 5 pts</li> <li>Observation form 0 pt</li> </ul> </li> </ul>		I, II, III, IV, V, VI, VII, VIII, IX
<ul style="list-style-type: none"> <li><b>Content Tests (10*3 pts=30 pts)</b></li> </ul>	2.3	I, II, III, IV, V, VI, VII
<ul style="list-style-type: none"> <li><b>Final Exam on BB (20 pts)</b></li> </ul>	2.3	I, II, III, IV, V, VI, VII

**Math Home Kit (MHK)-20 pts & Presentation (5 pts)**

Your group (group of 4) will prepare a math home kit for any grade from Prek through Grade 6. Decide one or two grade levels for MHK. You will include one children's book (math associated) and two/ore more interactive activities or games in a plastic box. You will need to include detailed step-by-step procedures of using MHK. In your MHK, you will include

- Children's book
- Standards (NCTM, TEKS, and CCS)
- Grade level
- Objective
- Needed Materials
- Key Math Concepts
- Procedures of Interactive Activities/Games

Your expenses on MHK will be reimbursed up to \$50.00. This is a funded project by the Office of Sustainability at UT Arlington. Keep all of your receipts. After you presented your group's MHK in class, your MHK would be donated to a Title 1 School in Arlington for children to check out to their homes to practice mathematics. One of your group members is welcome to come to a Saturday Numeracy Camp to present your MGK to children at the Title 1 school. Detailed schedule will be provided in a timely manner. This project is considered your Service Learning and Sustainability project.

### **Individual Lesson Plan (25 pts) TK 20 Key Assignment**

You will plan a math lesson appropriate for the target grade level and implement it in a developmentally appropriate manner. After you taught your math lesson in your early field experience class, write a post-reflection following EC6/ESL reflection form. Your cooperating teacher will need to fill out the observation form after she/he observed you teach.

- Lesson plan (20 pts.)
- Post-reflection (5pts.)
- Observation form (0 pt.)- *5 pts will be deducted if you don't turn in.*

### **Content Test (30 pts)**

You will turn in a total of 10 Chapter Test answer sheets with your own scratch papers (out of 13 Chapter Tests). Each Test is 3 pts worthy. In your main text book (Ricardo, D. F.), all chapters contain Chapter Tests at the end of every chapter. Each Chapter Test will range from 20 to 25 questions. Practice completing each question for one minute. You will turn in your answers with scratch paper which you used to solve Chapter Test questions. This content test will prepare you to practice for the TX Core Subject Test on math content portion.

### **Final Exam (20 pts)**

There will be 50 multiple-choice questions for your Final. You will have 1 hour to complete the Final Exam online. This means that you need to complete each question for approximately one minute. This is to help you practice the TX Core Subject Test on Math Portion. Final Exam will be composed of content and content specific pedagogy questions. More information will be provided in a timely manner.

### **Grading Policy**

Final numerical valuations relate to letter grades and points as follows:

A = 93 – 100%, B = 85 – 92%, C = 77- 84%, D = 70- 76%, F = Below 70%

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### **Library Resources**

Library Home Page.....	<a href="http://www.uta.edu/library">http://www.uta.edu/library</a>
Subject Guides.....	<a href="http://libguides.uta.edu">http://libguides.uta.edu</a>
Subject Librarians .....	<a href="http://www.uta.edu/library/help/subject-librarians.php">http://www.uta.edu/library/help/subject-librarians.php</a>
Database List .....	<a href="http://www.uta.edu/library/databases/index.php">http://www.uta.edu/library/databases/index.php</a>
Course Reserves .....	<a href="http://pulse.uta.edu/vwebv/enterCourseReserve.do">http://pulse.uta.edu/vwebv/enterCourseReserve.do</a>
Library Tutorials .....	<a href="http://www.uta.edu/library/help/tutorials.php">http://www.uta.edu/library/help/tutorials.php</a>
Connecting from Off- Campus .....	<a href="http://libguides.uta.edu/offcampus">http://libguides.uta.edu/offcampus</a>
Ask A Librarian.....	<a href="http://ask.uta.edu">http://ask.uta.edu</a>

The following URL houses a page where we have gathered many commonly used resources needed by students in online courses: <http://www.uta.edu/library/services/distance.php>. The subject librarian for your area can work with you to build a customized course page to support your class if you wish. For examples, visit <http://libguides.uta.edu/os> and <http://libguides.uta.edu/pols2311fm> . If you have any questions, please feel free to contact Suzanne Beckett, at [sbeckett@uta.edu](mailto:sbeckett@uta.edu) or at 817.272.0923.