

**University of North Texas at Dallas**  
**Fall 2015**  
**SYLLABUS**

<b>EDEE 4350-020      Mathematics in Elementary Grades EC-8      3Hrs</b>	
<b>Instructor Name:</b>	<b>Mark Moss</b>
<b>Office Location:</b>	No Office
<b>Office Phone</b>	Cell: 214-927-9350
<b>Email Address:</b>	John.Moss@untdallas.edu
<b>Office Hours:</b>	Appointments only. I am always available after class.
<b>Class Location:</b>	DAL 1 Room 348.2
<b>Class Times:</b>	Tuesdays 5:00 p.m. – 6:50 p.m.
<b>Course Catalog Description:</b>	Principles in mathematics teaching and learning based on national curriculum and assessment standards. The learning process in the development of mathematical thinking and skills in children.
<b>Prerequisites:</b>	Elementary Education majors must be admitted to Clinical I. Math 4-8 majors must have completed EDEE 3320.
<b>Access to Learning Resources:</b>	UNT Dallas Library <a href="http://www.unt.edu/unt-dallas/library.htm">http://www.unt.edu/unt-dallas/library.htm</a> UNT Dallas Writing Center 972-338-1645 Building 1, 3 <sup>rd</sup> r National Council of Teachers of Mathematics <a href="http://www.nctm.org">www.nctm.org</a> <a href="http://illuminations.nctm.org/">http://illuminations.nctm.org/</a> Texas Education Agency <a href="http://www.tea.state.tx.us/">http://www.tea.state.tx.us/</a>
<b>Course Goals or Overview:</b>	<ol style="list-style-type: none"> <li>1. The goal of this course is to prepare teachers to teach elementary-school mathematics.</li> <li>2. Students will learn how to implement the recommendations of the National Council of Teachers of Mathematics (NCTM).</li> <li>3. Students will learn how to use curriculum materials, manipulatives, and technology in math education.</li> <li>4. Students will learn how to integrate literature, arts, music, and theater into mathematics instruction.</li> <li>5. Students will examine the developmental milestone of how children learn mathematics and use this information to plan instruction for students in grades EC-8.</li> </ol>

<b>Learning Objectives:</b> By the end of this course, the student will understand...
<b>I Number Concepts</b> Texas Mathematics Generalist EC-6 Standard I: Number Concepts InTASC Standard 4: Content Knowledge
<b>II Patterns and Algebra</b> Texas Mathematics Generalist EC-6 Standard II: Patterns and Algebra InTASC Standard 4: Content Knowledge
<b>III Geometry and Measurement</b> Texas Mathematics Generalist EC-6 Standard III: Geometry and Measurement InTASC Standard 4: Content Knowledge
<b>IV Probability and Statistics</b> Texas Mathematics Generalist EC-6 Standard IV: Probability and Statistics InTASC Standard 4: Content Knowledge
<b>V Mathematical Processes</b> Texas Mathematics Generalist EC-6 Standard V: Mathematical Processes InTASC Standard 4: Content Knowledge
<b>VI Mathematical Perspectives</b> Texas Mathematics Generalist EC-6 Standard VI: Mathematical Perspectives InTASC Standard 4: Content Knowledge
<b>VII Mathematical Learning and Instruction</b> Texas Mathematics Generalist EC-6 Standard VII: Mathematical Learning and Instruction InTASC Standard 1: Learner Development
<b>VIII Mathematical Assessment</b> Texas Mathematics Generalist EC-6 Standard VIII: Mathematical Assessment InTASC Standard 6: Assessment
<b>IX Professional Development</b> Texas Mathematics Generalist EC-6 Standard IX: Professional Development InTASC Standard 9: Professional Learning and Ethical Practice
<b>English Language Arts and Reading Generalist EC-6 Standard IV</b> Literacy Development and Practice: Teachers use a variety of contexts to support the development of young students' literacy.

## Course Evaluation Methods

Instrument	Points	SLO	MGS
<b>Class Introduction Assignment</b> and Edmodo Sign-Up	50		Mathematics Generalist Standards I, II, III, IV, V, VI, VII, VIII
<b>Math Interactions Project – TK20 Key Assignment</b>	150	1, 3	Mathematics Generalist Standards VII, VIII, IX
<b>Checkpoint 2 Section 4 Standards 9 and 10</b> - Artifact and Reflection for each standard (40 points each) Section Cover Reflection (20 points) <b>TK20 Assignment</b>	100	1,3,4	Mathematics Generalist Standard IX InTASC Standards 9 and 10
<b>Discussions Assignments – Blackboard</b>	100	1,2,3,4	Mathematics Generalist Standards I, II, III, IV, V, VI, VII, VIII
<b>Math Quizzes – Blackboard</b> (five quizzes at 20 points each)	100	1,2,4	Mathematics Generalist Standards I, II, III, IV, V, VI, VII, VIII
<b>Teacher Interview</b>	25	1	Mathematics Generalist Standard IX InTASC Standards 9 and 10
<b>Mid Term Exam</b>	100	1,2,4	Mathematics Generalist Standards I, II, III, IV, V, VI, VII, VIII
<b>Project Share</b> Online Professional Development – <b>Standard Artifact</b>	25	1,3	Mathematics Generalist Standard IX InTASC Standards 9 and 10
<b>Article Quizzes – Blackboard</b> (five quizzes at 10 points each)	50	2,3,4	Mathematics Generalist Standards I, II, III, IV, V, VI, VII, VIII
<b>Grade level Tier II Intervention Activities Project</b>	150	2,3	Mathematics Generalist Standards Mathematics Generalist Standards I, II, III, IV, V, VI, VII, VIII
Final Exam	100	1,2,3,4	Mathematics Generalist Standards I, II, III, IV, V, VI, VII, VIII
<b>Attendance and Participation</b> (Including turning in your <b>Field Experience</b> documentation)	50		
<b>Total:</b>	<b>1,000</b>		

## **Assignment Submission Guidelines**

Students are responsible for ensuring that assignments are submitted to the correct place and in the correct format. Assignments that are submitted to the wrong place or in the wrong format will be considered late or will not be accepted.

**All assignments must be submitted to Blackboard unless the instructor give other directions in the syllabus or in class.**

The following assignments must be submitted to TK20:

- **Math Interactions project (click on Courses tab). You need to SUBMIT the Key Assignment.**
- **Checkpoint 2 Section 4 Standard Artifacts and Reflections, including the Region 10 online math training**

Students who need help with Blackboard should contact UNTD Distance Learning and Instructional Technologies at 972-338-1606. Students who need help with TK20 should contact **Genell McClendon at 972-338-1364 or [genell.mcclendon@untdallas.edu](mailto:genell.mcclendon@untdallas.edu)**. Students who need assistance with the **Project Share** math courses or **Edmodo.com** should contact your instructor immediately.

**Difficulty with technology is not an excuse to turn an assignment in late. Please plan ahead.**

**Failure to complete any on-line assignments will result in an incomplete in the class.**

All assignments must be submitted as Microsoft Word documents. PDFs will not be accepted.

**Papers are expected to have minimal spelling and grammar mistakes.** Students are encouraged to take advantage of the services offered in the UNT Dallas Writing Center.


### **Late Assignments**

**A late penalty of 5 points a day will apply to papers or assignments submitted after the due date.** Papers or assignments that are more than two weeks late will not receive points. Too many missing and late assignments will put you at risk of not passing the class.

**No assignments will be accepted after the final exam or after the last day of class without prior permission from the instructor.**





## Course Outline






This schedule is subject to change by the instructor.






 **RED** indicates that there is an assignment to turn in or complete.







 **BLUE** indicates a test or quiz.

 **GREEN** indicates a Module Discussion Assignment







Module	Class and Online Activities	Class Assignments Due Dates	SLO's
<p><b>Module 1</b> August 26<sup>th</sup> – September 1<sup>st</sup></p>	<p><b>Math Standard 1: Numbers</b> Counting and Number Sense</p> <p><b>ELAR Standard 4:</b> Literature Related to Counting</p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Discuss course requirements and content and process standards</li> <li>• Video: The Ants Go Marching (Music and Theater)</li> <li>• Basic Number Concepts</li> <li>• Video: Ten Frames</li> </ul> <p><b>Online Module 1:</b></p> <p><b>Videos</b></p> <ul style="list-style-type: none"> <li>• Math Buddies</li> </ul> <p><b>Required Articles</b></p> <ul style="list-style-type: none"> <li>• Article 1 - Number Concepts and Special Needs Students</li> <li>• Article 2 - Experiences to Help Children Learn to Count On</li> </ul>	<p> <b>Class Introduction Assignment on Edmodo.com (Create your account as a Teacher) Due September 3rd</b></p> <p> <b>Math Buddies Module 1 Discussion Assignment Due September 1st</b></p>	1,2,3,4
<p><b>Module 2</b> September 2 - September 8</p>	<p><b>Math Standard 1: Numbers</b> Understanding Operations and Mastering Basic Facts</p> <p><b>ELAR Standard 4:</b> Literature Related to the Four Operations</p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Use ten frames and hundreds charts</li> <li>• Read <i>Children's Literature</i></li> </ul> <p><b>Online Module 2:</b></p> <p><b>Videos</b></p>	<p> <b>On-line Math Quiz 1 Modules 1-2 Due September 10th</b></p> <p> <b>Dino Math Module 2 Discussion Due September 8</b></p>	1,2,3









	<ul style="list-style-type: none"> <li>• Amazing Equations</li> </ul> <p><b>Required Articles</b></p> <ul style="list-style-type: none"> <li>• Article 3 - Developing Thinking Strategies for Addition Facts</li> <li>• Article 4 - Sharing Beans with Friends</li> <li>•</li> </ul>		
<p><b>Module 3</b> September 9 – September 16</p>	<p><b>Math Standard 1: Numbers</b> Place Value</p> <p><b>Face-to-Face</b> Base-ten blocks</p> <p><b>Online Module 3:</b> <b>Videos</b></p> <ul style="list-style-type: none"> <li>• Place Value Centers</li> </ul> <p><b>Required Articles</b></p> <ul style="list-style-type: none"> <li>• Article 5 - 10 Big Math Ideas by Marilyn Burns</li> <li>• Article 6 - Disequilibrium &amp; Questioning</li> </ul>	<p> <b>Article Quiz 1</b> <b>(Read all articles in Modules 1-3)</b> <b>Due September 18</b></p> <p> <b>Math Interactions</b> <b>Activity 1 - Step 1</b> <b>Post DRAFT lesson plan in Edmodo along with your video. Due Friday September 18th. Peer comments should be posted by Tuesday September 22.</b></p> <p> <b>Place Value Centers Discussion</b> <b>Due September 16</b></p>	1,2,3,4
<p><b>Module 4</b> September 16 – September 22</p>	<p><b>Math Standard 1: Numbers</b> Addition and Subtraction with Large Numbers</p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Use base-ten blocks to model addition and subtraction</li> </ul> <p><b>Online Module 4:</b> <b>Web Quest</b> Addition and Subtraction websites.</p> <p><b>Required Articles</b></p> <ul style="list-style-type: none"> <li>• Article 7: Nothing Basic about Basic Facts</li> <li>• Article 8: Strategies for Basic-Facts Instruction</li> </ul>	<p> <b>Math Quiz 2</b> <b>Modules 3 – 4</b> <b>Due September 24</b></p> <p> <b>Web Quest</b> <b>Due September 22</b></p>	1,2,3


<p><b>Module 5</b> September 23 – September 29</p>	<p><b>Math Standard 1: Numbers</b> Multiplication and Division with Large Numbers</p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Discuss and practice multiplication and division methods</li> <li>• Multiplication Strategies</li> </ul> <p><b>Online Module 5:</b></p> <ul style="list-style-type: none"> <li>• Multiplication Strategies Video</li> </ul>	<p></p> <p><b>Math Interactions</b> <b>Activity 1 - Step 2</b> <b>Video linked to Blackboard</b> <b>and reflection posted in</b> <b>Blackboard</b> <b>Due September 30</b></p> <p></p> <p><b>Article Quiz 2</b> <b>(Articles 5-8)</b> <b>Due September 30</b></p> <p></p> <p><b>Multiplication Strategies</b> <b>Discussion</b> <b>Due September 29</b></p>	<p>1,2,3</p>
<p><b>Module 6</b> September 30 – October 6</p>	<p><b>Math Standard 1: Numbers:</b> Fractions &amp; Decimals</p> <p><b>ELAR Standard 4:</b> Literature Related to Fractions</p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Fractions – Developing Concepts</li> <li>• Using manipulatives</li> </ul> <p><b>Online Module 6:</b></p> <ul style="list-style-type: none"> <li>• Sharing Cookies</li> <li>• Meter Cords</li> </ul>	<p></p> <p><b>Math Quiz 3</b> <b>Modules 5 – 6</b> <b>Due October 8</b></p> <p></p> <p><b>Sharing Cookies and Meter</b> <b>Cords Discussion Due</b> <b>October 6</b></p>	<p>1,2,3</p>

<p><b>October 7</b> <b>October 13</b></p>	<p><b>Mid Term Exam</b></p> <ul style="list-style-type: none"> <li>• <b>Mostly Multiple Choice</b></li> <li>• <b>Comprehensive</b></li> <li>• <b>The test will be over Weeks 1 - 6</b></li> </ul>	<p> Teacher Interview Standard 9 or 10 Reflection and Artifact Due October 13<sup>th</sup>. Post in Blackbaord.</p> <p> <b>Mid Term Exam</b> <b>October 13</b></p>	<p><b>1,2,3</b> <b>,4</b></p>
<p><b>Module 7</b> <b>October 14 –</b> <b>October 20</b></p>	<p><b>Math Standard 1: Numbers</b> Money, Time, Temperature <b>ELAR Standard 4:</b> Literature Related to Money <b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Discuss STAAR questions</li> <li>• Review Children’s Literature</li> </ul> <p><b>Online Module 7:</b></p> <ul style="list-style-type: none"> <li>• How Long is a Minute?</li> </ul> <p><b>Required Article</b></p> <ul style="list-style-type: none"> <li>• Article 7 - Making Sense of Cents</li> </ul>	<p> Math Interactions Activity 2 – Step 1 Post Lesson Plan 2 No Video Required Discuss in class Due October 18<sup>th</sup>. Peer comments due October 20<sup>th</sup>.</p> <p> <b>How Long is a Minute</b> <b>Discussion</b> <b>Due October 20</b></p>	
<p><b>Module 8</b> <b>October 21</b> <b>October 27</b></p>	<p><b>Math Standard 2: Patterns &amp; Algebra</b> <b>ELAR Standard 4:</b> Literature Related to Patterns</p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Make patterns with musical instruments</li> <li>• Review <i>Children’s Literature</i></li> <li>• Investigate factors, multiples, prime and composite numbers</li> <li>• Form Groups for the Intervention Activities Project</li> </ul> <p><b>Online Module 8:</b></p> <p><b>Video</b></p> <ul style="list-style-type: none"> <li>• People Patterns</li> </ul> <p><b>Required Articles</b></p>	<p> <b>Article Quiz #3</b> <b>(Read articles 7 - 9)</b> <b>Due October 29</b></p> <p> <b>How Long is a Minute</b> <b>Discussion</b> <b>Due October 27</b></p>	<p><b>1,2,3,4</b></p>



	<ul style="list-style-type: none"> <li>• Article 8 - Sorting and Patterning in Kindergarten</li> <li>• Article 9 - Matthew's Thinking About Patterns</li> </ul>		
<p><b>Module 9</b> <b>October 28 – November 3</b></p>	<p><b>Math Standard 3: Geometry: two-dimensional and three dimensional shapes</b></p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Quadrilaterals on the Geoboard</li> <li>• Read <i>Children's Literature</i></li> <li>• Pattern Blocks</li> </ul> <p><b>Online Module 10:</b></p> <p><b>Required Articles</b></p> <ul style="list-style-type: none"> <li>• Article 10 - Developing Geometric Thinking</li> <li>• Article 11 - Through Activities that Begin with Play</li> <li>• Shape Up!</li> </ul> <p><b>Videos</b></p> <ul style="list-style-type: none"> <li>• Shapes from Squares</li> </ul>	 <p><b>Math Interactions</b> <b>Activity 2 – Step 2</b> <b>Video linked to Blackboard and reflection posted in Blackboard</b> <b>Due November 5</b></p>  <p><b>Math Quiz 3 (Modules 7 – 9) Due November 5</b></p>  <p><b>Shapes from Squares and A Rocket Shape Discussion</b> <b>Due November 3.</b></p>	1,2,3
<p><b>Module 10</b> <b>November 4 – November 10</b></p>	<p><b>Math Standard 3: Geometry and Measurement</b> Measurement</p> <p><b>ELA Standard 4:</b> Literature Related to Measurement</p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Use manipulatives to measure</li> <li>• Standard and Non-Standard measuring</li> </ul> <p><b>Online Module 11:</b></p> <p><b>Required Article</b></p> <ul style="list-style-type: none"> <li>• A Case of Units</li> </ul> <p><b>Video</b></p> <ul style="list-style-type: none"> <li>• Meter Cords</li> </ul>	 <p><b>Math Interactions</b> <b>Step 3</b> <b>Post your summary. lesson plan 1 and reflection, and lesson plan 2 and Reflection all in one file.</b> <b>Post to Blackboard</b> <b>Due November 12</b></p>  <p><b>Meter Cords Discussion</b> <b>Due November 10</b></p>  <p><b>Article Quiz #4 (Read articles 10 -11)</b> <b>Due November 12</b></p>	1,2,3,4
<b>Module 11</b>	<b>Math Standard 3: Measurement</b>		

<p><b>November 11- November 17</b></p>	<p><b>ELA Standard 4:</b> Literature Related to Measurement</p> <p><b>Math Standard 3: Measurement</b> <b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Use manipulatives to measure</li> <li>• Read <i>Measuring Penny</i></li> </ul> <p><b>Online Module 11:</b></p> <ul style="list-style-type: none"> <li>• Gallon Man and King G</li> </ul> <p><b>Required Article</b></p> <ul style="list-style-type: none"> <li>• Article 12 - A Case of Units</li> </ul>	<p></p> <p><b>Intervention Activity #1</b> <b>Video, Procedures, and</b> <b>manipulatives posted in</b> <b>Edmodo.com</b> <b>Due November 19</b></p> <p></p> <p><b>Gallon Man and King G</b> <b>Discussion</b> <b>Due November 17</b></p>	<p><b>1,2,3,4</b></p>
<p><b>Module 12</b> <b>November 18 – November 24</b></p>	<p><b>Math Standard 3: Measurement: Area and Perimeter</b></p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Use square tiles to investigate area and perimeter</li> </ul> <p><b>Online Module 12:</b></p> <p><b>Required Article</b></p> <ul style="list-style-type: none"> <li>• Article 13 - I Scream, You Scream: Data Analysis with Kindergarteners</li> </ul>	<p></p> <p><b>Article Quiz #5</b> <b>(Read articles 12 and 13)</b> <b>Due April 28</b></p> <p></p> <p><b>No Discussion</b></p> <p></p> <p><b>Intervention Activity #2</b> <b>video, procedures, and</b> <b>manipulatives posted in</b> <b>Edmodo.com</b> <b>Due November 26</b></p>	<p><b>1,2,3</b></p>
<p><b>Module 13</b> <b>November 25 – December 1</b></p>	<p><b>Math Standard 4: Data Analysis, Probability and Statistics</b></p> <p><b>Face-to-Face</b></p> <ul style="list-style-type: none"> <li>• Build a graph</li> </ul> <p><b>Online Module 13:</b> <b>Videos</b></p> <ul style="list-style-type: none"> <li>• Ladybugs</li> <li>• Marshmallows</li> <li>• Dice Toss</li> </ul>	<p></p> <p><b>Math Quiz 5</b> <b>(Modules 10 – 12)</b> <b>Due May 5</b></p> <p></p> <p><b>Ladybugs, Marshmallows,</b> <b>and Dice Toss Discussion</b> <b>Due November 25</b></p> <p></p> <p><b>Complete Project Share</b> <b>Online Training</b> <b>Section 4 Cover Sheet</b></p>	<p><b>1,2,3</b></p>

<p><b>Module 15</b> <b>December 2 –</b> <b>December 8</b></p>	<p><b>Math Intervention Games Extravaganza or Make up</b> <b>Day</b></p>	 <p><b>Complete all TK20</b> <b>Uploads by Tuesday,</b> <b>December 7</b> <b>Complete and Submit the</b> <b>Intervention Games Project</b> on Edmodo.com and Blackboard according to class directions</p>	
<p><b>Finals Week</b> <b>December 9</b></p>	<p><b>Final Exam (Comprehensive)</b> <b>Watch for class announcements about specific dates, locations, and times of final exams.</b></p>		

### EDMODO – About Me/Us

Technology in the classroom is increasing across the country so rapidly it is difficult to keep up with the changes. Apps, Facebook, Twitter, and a multitude of other technologies are entering our classrooms daily. It can't be stopped! When you join the classroom as a teacher, you will be expected to perform on the same level as seasoned teachers. They are way ahead of you when it comes to district curriculum, campus expectations, and simply knowing where the bathroom is located. It's simply not fair!

However, new teachers who are equipped with technology skills can quickly make an impression on the faculty and their administrator. They want to invest in you, so give them a reason too. Edmodo is the Facebook for educators. It's free, user friendly, and safe. You can create an online community for students to post their assignments, work with groups outside the classroom, and assess their knowledge.

#### Rubric

**5 Points:** Go to [www.edmodo.com](http://www.edmodo.com) to create your teacher account (**Make sure you register as a teacher**). You will be prompted to join a group. The group code for our class. After creating your account, complete your profile section. Upload a professional photo by clicking on the pen inside the picture frame. **Make sure you identify yourself as a Pre-Service Teacher at UNT Dallas.**

**10 Points:** **Write a thorough description of yourself in the About Me section of Edmodo.** I would type it in Microsoft Word to use grammar and spell check, and then copy it into your Edmodo account. The following is a rubric for what I expect to see on your account. Whoever you network with on Edmodo will be able to see this section. It should be professional and concise.

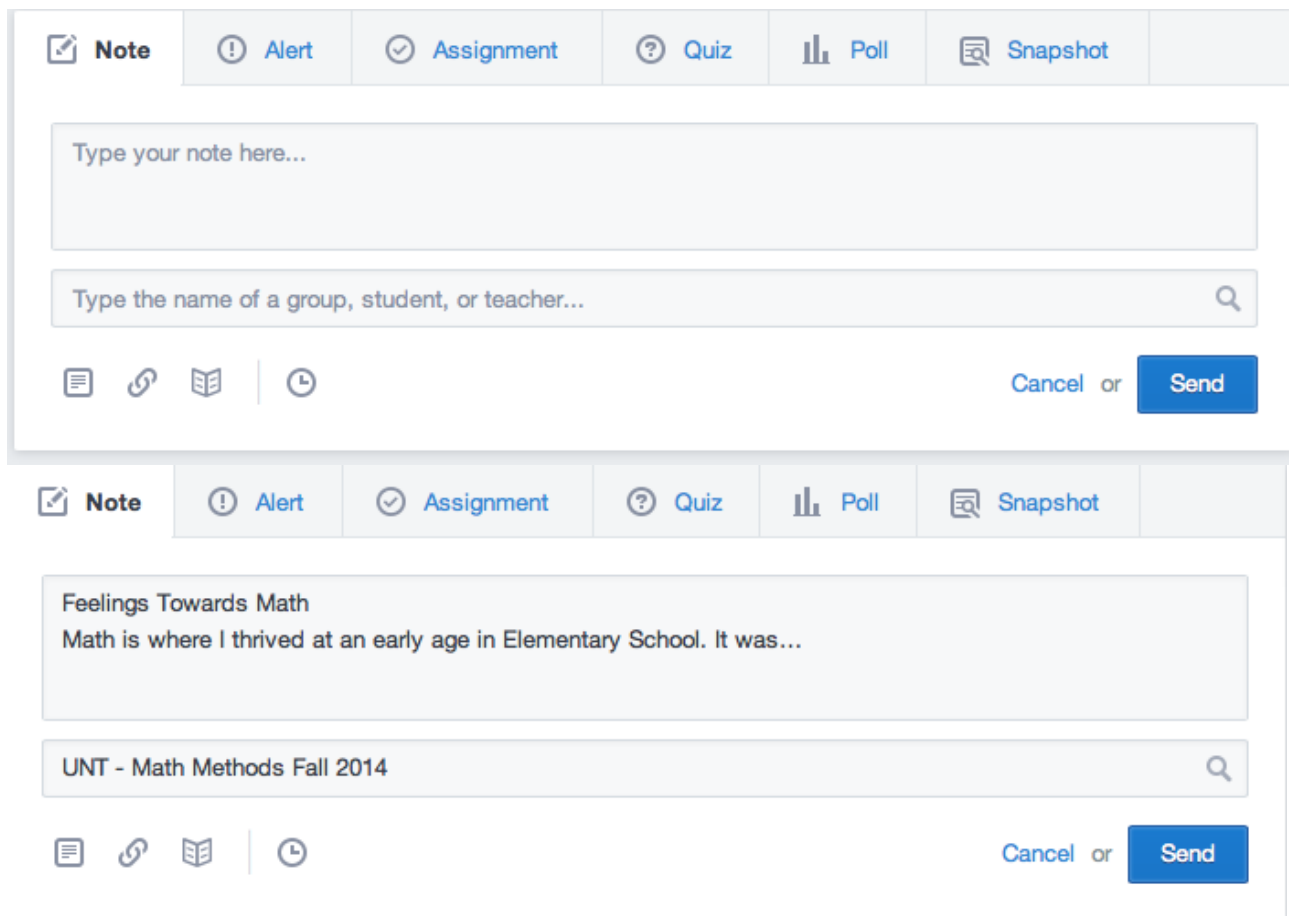
The purposes of the About Me section is to a) help your instructor and other teachers get to know you and b) give you a chance to reflect on your feelings about teaching mathematics. The About Me section should be between 100 and 200 words long and answer the following questions:

Write a little about yourself.

- i. Where you were raised?
- ii. How old are you?

- iii. What language are you most comfortable with?
- iv. Do you feel like your ethnicity may have affected your education experience?
- v. What experience do you have working with children?
- vi. Why are you an education major?
- vii. What else should other educational professionals know about you?

**30 points:** This section will consist of three parts. You will need to answer the three questions listed below in Edmodo. First, click on the note section in Edmodo. It should already be up when you log in, but go ahead and click on it. Type the title provided with each question. Then type your response. The picture below is an example of what the note looks like when you click on it. The second picture shows how I want your post to look.



After typing your first post, press send. This is very similar to a discussion board in Blackboard. Everyone in our class, but only people in our class, will be able to see your post. **Answer all three questions in the same way by making separate posts for each question.**

**Question 1:** How did you feel about math when you were in school? Easy? Hard? Like it? Not like it? Why? **Title: Feeling Towards Math**

**Question 2:** Describe a math experience you had where you were either inspired or you were discouraged. Explain how your feelings towards math changed with that experience. **Title: Change of Feelings Towards Math**

**Question 3: If you did not enjoy math in school**, how will you improve your math instruction so that your students will have a better experience than you did? **If you did enjoy math in school**, how will you reach those students who did not enjoy math? **Title: Personal Growth Plan**

**5 Points:** Find two separate posts from two different people that you identify with and simply explain why you connect with them. Each post should only be 3 to 5 sentences long.

**All posts are expected to have minimal spelling and grammar mistakes.** Students are encouraged to take advantage of the services offered in the UNT Dallas Writing Center if needed.

## Math Interactions Project – TK20 Key Assignment

**The Math Interactions project consists of five parts:**

(Each part will be posted in Blackboard at separate times. Upon completion of all 5 parts, they should be organized as detailed bellow and posted in TK20).

- **Introduction:** Summary of the project and what you learned
  - Write the summary last but use it as the first page.
- **Lesson plan #1** (must include manipulatives)
- **Reflection on activity #1**
- **Lesson plan #2** (must include technology)
- **Reflection on activity #2**



Identify a child or small group of children that you will be able to do a short math lesson. It is fine to use your own child, a neighbor, a friend's child, or a child you know from church, etc. As a last resort, you can use children from your field experience. **It would be better for you to pick a student you can video. If this is not possible, you can still film your activity without filming the child.**

Identify a math concept and **Texas Essential Knowledge and Skills (TEKS)** that would be appropriate for the age or grade level.

Plan a short math activity or game (10-15 minutes).

**Steps 1 and 2 of this assignment will be repeated twice. Step 3 is the final part to the assignment.** Each step will be posted to either Edmodo or Blackboard as directed in the syllabus on specific dates. It is extremely important to be timely in your submissions. Remember, all three of these steps will be repeated twice because you will be doing two separate lessons with your students.

**Step: 1** Write lesson plans that includes:

- The **TEKS** that match your activity as your objectives. (Use the content standards, not just process standards)
- The procedure that explains how the manipulatives and/or technology will be used
- The assessment that you will use to check the children's understanding. Make sure your assessment activity matches your objectives and clearly measures achievement

The lesson plans can follow any format you like as long as it is clear and complete. The lesson plan should be one to two full pages double-spaced (at least 200 words).

Video Post – This will only be done on the first activity. Post your lesson plan via Edmodo as directed by your instructor. Post a 2-3 minute video explaining the procedures, manipulatives, technology, and assessments you plan to use in your lesson. You will need to watch at least two other lessons presented by your peers and make a post on each of them. This portion of the Math Interactions Assignment is worth 20 points.

Step 2) Conduct your activities with the child or children. Videotape yourself delivering the instruction and leading the activities. You will complete 2 videos, one for each lesson. **Do not include children in your video unless you have parental permission in writing to do so.**

Write a reflection that includes:

- A description of the child or children (number of children, grade level, etc.)
- How you modified your instruction as you went through the lesson
- What students learned and how you know that they learned. Be very specific.
- Why learning did or did not occur. Be very specific.
- What you learned about teaching

The reflection should be one to two full pages double-spaced (between 200 and 300 words). You will post the link to your video of your lesson with your written reflection in Blackboard.

Step 3) Write a summary of the entire project and what you learned. This summary should be used as an introduction when you assemble the five parts. Your summary should be one – two paragraphs, followed by one paragraph telling what you learned. One page in length is sufficient.

The Math Interactions project must be submitted to TK20 in the Courses tab. (It is a Key Assignment.)

You must click **SUBMIT**. **Do not upload the videos to TK20.**

## Section 4 of TK20

Students will need to complete Section 4 of Checkpoint 2. You will need to:

- Obtain at least one document (**artifact**) to represent Standard 9 (Professional Learning and Ethical Practice). **You may use the Teacher Interview Paper, Campus Parent Night for Math, or a Math workshop you were able to attend.**
- Write a paragraph 200 – 300 explaining what Standard 9 means to you and why you chose this document.
- Obtain at least one document (**artifact**) to represent Standard 10 (Leadership and Collaboration).
- Write a paragraph explaining what Standard 10 means to you and why you chose this document. **You may use the Teacher Interview Paper, Campus Parent Night for Math, or the Grade Level Intervention Activities Project for this standard.**
- Instead of answering the reflection question for section 4, please answer this question instead:

What have you learned about Professional Responsibility (standards 9 and 10) this semester? Think about what you have learned in your university courses and in your field experience. How has your understanding of standards 9 and 10 changed since you completed Checkpoint 1? Remember to discuss the following:

- Ongoing professional learning
- The effects of teachers' choices on learners, families, other professionals, and the community
- Leadership roles for teachers
- Collaborating with learners, families, colleagues, and other school professionals.

Give specific examples of experiences that you have had this semester that have changed your thinking in these areas.

The three parts above (standard 9, standard 10, reflection) need to be submitted to TK20 in TWO places. Type all three parts into ONE Word document and upload to Blackboard. Also, copy and paste the parts into Section 4 of Checkpoint 2 in TK20.

**You need a score of 3 or 4 to “pass” Section 4.** Your responses to the three parts should total AT LEAST 600 words. Writing 600 words does not guarantee a score of 3. You will need to write significantly more than 600 words to score a 4. Remember that your writing needs to be specific with meaningful and thorough substance.

### **Discussion Assignments**

Discussion assignments in this course are designed for you to observe math instruction in a classroom setting and critically evaluate the delivery of the content and instructional methods. Your assignments will consist of viewing the assigned link in the module for the week, answering the question provided on the Discussion Board, and responding to a post from another classmate. Your initial post that answers the Discussion Board question is due two days after your class meets each week. Responses to classmates are due before the start of the next module. (For example, if your class meets every Tuesday, your first post is due Thursday before midnight, and your response is due the following Monday before midnight). Here are a few ideas for responding to classmates:

- Sharing an insight gained from the post
- Validating someone's point of view
- Making a suggestion

Feel free to respond in ways that evidence a deep reflection of the assignment and conversation. Please avoid surface level responses such as “I like the way,” or “My favorite part.”

### **Math Quizzes – Blackboard**

The math quizzes are designed to give you individualized practice with the content and strategies presented in class and throughout the course. Keep in mind that the quizzes are timed. After you submit your answers, you will receive immediate feedback **after the due date** that will help you prepare for the mid-term and final exam. Math quizzes must be taken on or before the due date determined by the instructor. **Since feedback is made available after the quiz due date, you may**

**not get points for quizzes after the due date.**

## **Article Quizzes - Blackboard**

The purposes of the article quizzes are for students to examine research and use this information to demonstrate an understanding of how young children learn math concepts. Article quizzes are multiple choice and timed. Article quizzes must be taken on or before the due date determined by the instructor.

## **Teacher Interview Paper**

The purpose of the Teacher Interview paper is to learn how practicing teachers implement InTASC Standard #9 (Professional Learning and Ethical Practice) and Standard #10 (Leadership and Collaboration).

First, read InTASC standards 9 and 10 (pages 18 and 19). Then, contact a practicing teacher and set up an interview. You will need about 20-30 minutes.

Before the interview, read the questions below and think about which ones you want to make sure you ask. Think about whether there are any other questions related to Standards 9 and 10 that you would like to ask. Plan how you will record the answers (tape record or take notes?)

During the interview, feel free to ask any follow-up questions that occur to you. Make sure you THANK the teacher for taking time to help you.

Sample Questions for the Teacher Interview for 4350 Mathematics in Grades EC - 8:

### **Math Specific (You must pick at least 2 of these questions):**

1. What type of math professional development activities have you participated in? Which were most helpful to you?
2. How would you describe your overall experiences learning math?
3. How do you keep up with the latest changes in math instruction? Can you give a specific example?
4. How does the way you were taught math compare to the way you teach math to your students today?
5. What are some strategies you have used with your students who struggle to learn math?

### **General:**

1. What other types of professional development activities have you participated in? Which were most helpful to you?
2. How do you use self-assessment to continue to improve your teaching? Can you give a specific example?
3. How do you think your personal identity (gender, race, background) and prior experience affect your perceptions and expectations?
4. What legal and ethical requirements exist for teachers? (For example, can you talk about confidentiality?)
5. Do you belong to an instructional team? If so, how do you take an active role on that team?
6. In addition to the instructional team, what other school professionals do you work with? How do you establish and maintain good relationships with other teachers and with school administrators?



7. How do you establish communication with families? Is it difficult when families come from a different culture or speak a different language?
8. Do you ever find it necessary to advocate for students? If so, can you give a specific example?

**Write a three-page paper that summarizes the interview.** USE MICROSOFT WORD; please do NOT submit a PDF. The paper should be double-spaced. Use Times New Roman 12-point font and 1-inch margins. The paper should be at least 900 words long.

**Papers are expected to have minimal spelling and grammar mistakes.** Students are encouraged to take advantage of the services offered in the UNT Dallas Writing Center.

**A late penalty will apply to papers submitted after the due date. Papers that are more than two weeks late will not be accepted.**

**The Teacher Interview paper should be submitted to TK20 as one of the artifacts (documents) for Section 4.** The Teacher Interview is NOT a Key Assignment, so it does NOT go in the Courses tab.

## Grade Level Intervention Activities Project

**Response to Intervention (RTI)** is a comprehensive way of offering differentiated instruction to all students based on assessment results. The general intentions are to:

1. Provide a systematic approach to intervention with documentation as an important step before students are referred for special education.
2. Show that steps were taken to ensure a fair and thorough intervention process so that students are not referred for Special Education unnecessarily. See **Wrights Law** online for more detailed information.

Teachers are required to use research-based methods of instruction for intervention over a predefined period of time. These intervention activities are in addition to your regular lessons, and they are for students who are not showing evidence of mastering the content. You will keep documentation of each student's progress, and this will be added to other information to submit the Special Education staff if a referral for special education is made.

The state requires 30 minutes of additional intervention for students who have failed a tested subject. Your school district will give you information about the specific procedures followed to implement RTI intervention. A common practice for all district RTI implementation is that **you decide** specific activities for each tier of students. You will have to provide this intervention along with your team at your school. **Your focus will be on Tier 2 students.** Depending on the model adopted in your school, you may also be providing services to Tier 3 students. The idea that you will have every student on a Tier 1 level of instruction is an extremely idealistic point of view. That won't ever happen. You are being trained to provide instruction for each Tier level. The purpose of this assignment is to help prepare you for math intervention in your classroom.

An example of an effective intervention time may look like this:

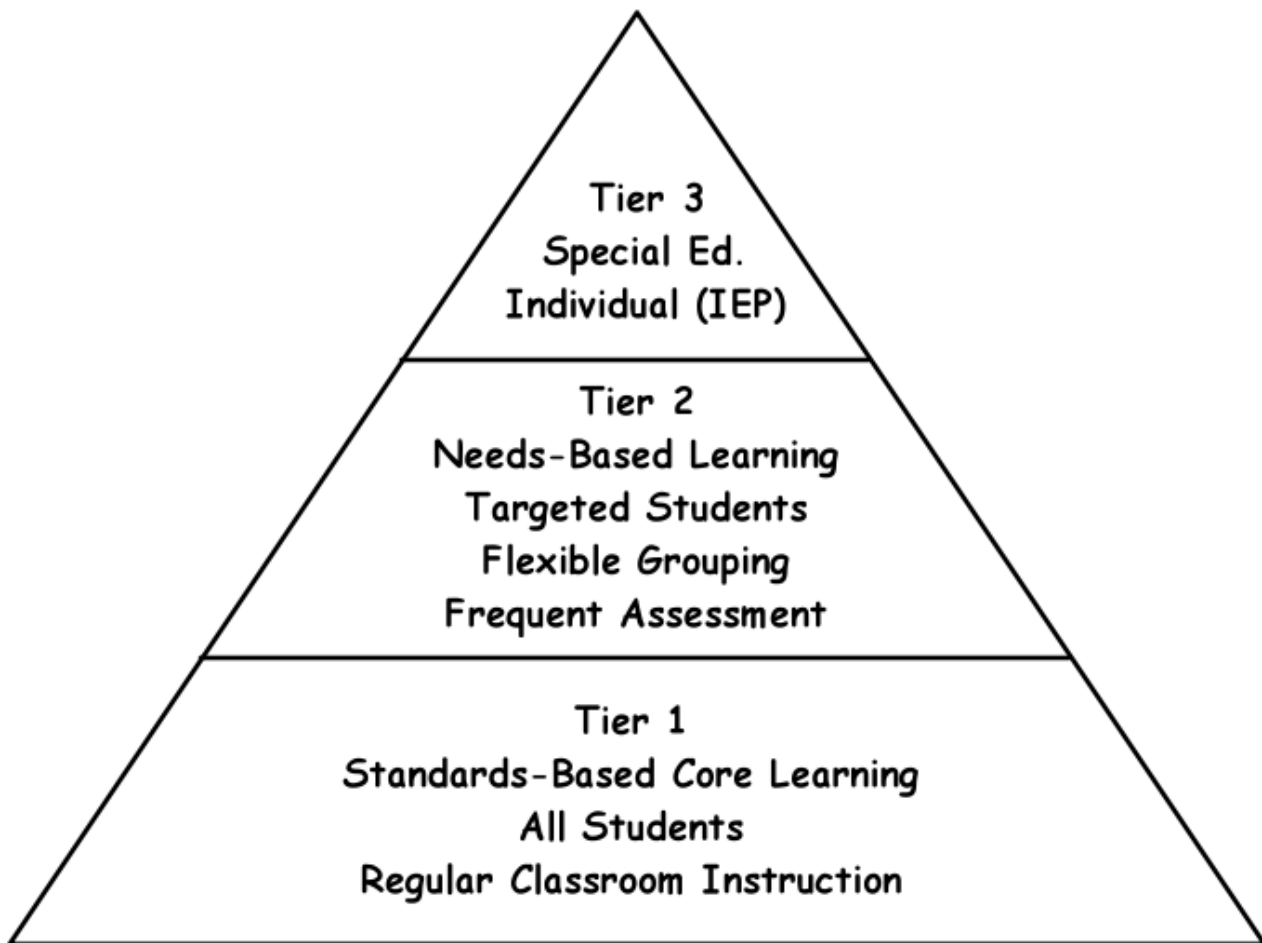
I have 5 in a small group at a table with me. I have five students doing computer activities such as Think Through Math or Coolmath.com. I have 2-3 other groups doing center activities. This is our focus. Some of these groups are Tier 1 students and some will be Tier 2. You must provide them with engaging activities to help support their Tier 1 instruction.

**Your assignment:**

Choose a grade level kindergarten – sixth and research intervention activities that can be done with Tier 1, Tier 2, and Tier 3 students.

Find a small group of classmates (two to four people including yourself) who are interested in the same grade level. Each one of you will research and demonstrate two intervention activities for your grade level. That means a group of 3 pre-service teachers will research or create 6 center activities. Each activity will have to be from a separate TEK. You will research or create an activity that can be done in small group or individually.

# RTI - Response to Intervention



## Rubric

Activities	Points
<b>Instructions</b> – Provide clear and understandable instructions for the teacher and student.	10
<b>Materials</b> – List or provide materials for your activity. The activity should be used with both purchased manipulatives or created manipulatives. Please provide a copy of the game board, activity, and template for teacher made materials. Each student in the class should be able to create your activity. To save money, you may post template materials on EDMODO along with your video.	20
<b>Video</b> – Create a video explaining how to do your activities. Demonstrate it with your peers and post it on YouTube. Create a link in Edmodo.	40
<b>Present your activities in class at our Math Intervention Extravaganza.</b> You and your partners will have a table set up with your activities. You will take turns demonstrating your activities while your peers rotate from table to table. This means you must be familiar with your team’s activities.	20
<b>Provide a bibliography for the activities you found.</b> You may NOT use copyrighted work unless you give the credit to the source. Good teachers research what other teachers do and then adapt it for their needs. As long as you give credit to the person who made it, you can use it for educational purposes unless it is a copyrighted work that specifically puts limitations on how you can use it. Be sure to focus on how we can use the activity to help students on a specific objective.	20
<b>Reflection</b> – Write a one-page reflection explaining what you learned from this project and how you will use it in your class.	30
<b>Timely Submission</b> – Upload everything to Edmodo.com according to class directions. After everything is on Edmodo, turn in your Reflection to Blackboard for your final grade	10

## Teacher Interview Paper

The purpose of the Teacher Interview paper is to learn how practicing teachers implement InTASC Standard #9 (Professional Learning and Ethical Practice) and Standard #10 (Leadership and Collaboration).

First, read InTASC standards 9 and 10 (pages 18 and 19). Then, contact a practicing teacher and set up an interview. You will need about 20-30 minutes.

Before the interview, read the questions below and think about which ones you want to make sure you ask. Think about whether there are any other questions related to Standards 9 and 10 that you would like to ask. Plan how you will record the answers (tape record or take notes?)

During the interview, feel free to ask any follow-up questions that occur to you. Make sure you THANK the teacher for taking time to help you.

Sample Questions for the Teacher Interview for 4350 Mathematics in Grades EC - 8:

**Math Specific (You must pick at least 2 of these questions):**

6. What type of math professional development activities have you participated in? Which were most helpful to you?
7. How would you describe your overall experiences learning math?
8. How do you keep up with the latest changes in math instruction? Can you give a specific example?
9. How does the way you were taught math compare to the way you teach math to your students today?
10. What are some strategies you have used with your students who struggle to learn math?

**General:**

9. What other types of professional development activities have you participated in? Which were most helpful to you?
10. How do you use self-assessment to continue to improve your teaching? Can you give a specific example?
11. How do you think your personal identity (gender, race, background) and prior experience affect your perceptions and expectations?
12. What legal and ethical requirements exist for teachers? (For example, can you talk about confidentiality?)
13. Do you belong to an instructional team? If so, how do you take an active role on that team?
14. In addition to the instructional team, what other school professionals do you work with? How do you establish and maintain good relationships with other teachers and with school administrators?
15. How do you establish communication with families? Is it difficult when families come from a different culture or speak a different language?
16. Do you ever find it necessary to advocate for students? If so, can you give a specific example?

**Write a three-page paper that summarizes the interview.** USE MICROSOFT WORD; please do NOT submit a PDF. The paper should be double-spaced. Use Times New Roman 12-point font and 1-inch margins. The paper should be at least 900 words long.

**Papers are expected to have minimal spelling and grammar mistakes.** Students are encouraged to take advantage of the services offered in the UNT Dallas Writing Center.

**A late penalty will apply to papers submitted after the due date. Papers that are more than two weeks late will not be accepted.**

**The Teacher Interview paper should be submitted to TK20 as one of the artifacts (documents) for Section 4.** The Teacher Interview is NOT a Key Assignment, so it does NOT go in the Courses tab.

## Field Experience Requirements

**All students enrolled in EDEE 4350 are required to complete 20 hours of field experience in an elementary or middle school.** This requirement applies to students seeking EC-6 certification and to those seeking Math 4-8 certification. Students must observe math classes for a significant portion of the 20 hours.

The following is a list of suggested activities for the teacher candidate to engage in during the field experience.

1. Sit with a teacher as he or she plans a math lesson. Ask the teacher to explain the parts of the lesson plan. For example, what is the objective of the lesson? What assessment will be used?
2. Attend a joint-planning meeting in which several teachers meet to discuss upcoming lessons.
3. Observe a math lesson from beginning to end. Take notes on assessment, classroom management, dialog, and student engagement.
4. Help a single student or a small group of students with a math activity or assignment. For example, this can be done at a learning center or in a tutoring situation.
5. Write a lesson plan for a short math activity, game, or lesson that could be conducted with a small group of students. Review your plans with the teacher. Conduct your activity with students. **(This could be part of the Math Interactions project.)**

## Project Share Online Professional Development

Each student will be enrolled in a Project Share Texas Course as your math professional development in partial fulfillment of the TK20 Section 4 portfolio requirement. Additional directions for Project Share are available on Blackboard under Course Resources. You can plan for approximately 3 hours total to complete the course. You can stop and save your work at any point and resume the course until it is complete. The entire assignment, including the time frame and due date will be discussed in class.

## Attendance and Participation

Students who are absent from class for any reason will not receive attendance points for that day. If you are late to class by more than 10 minutes, it will affect your attendance grade. **All students will be asked to commit to arriving 30 minutes before class starts at least one time in the semester to help set up materials for the day.**

“Participation” includes paying attention and participating in group math activities and discussion (staying on topic). Please use technology for note-taking and other activities related to the class. **This course is designed for active participation, not for you just to sit and hear a lecture or just do math problems the entire time.**

Participation also includes the activities you complete during your Field Experience, and making sure you turn in that documentation to your instructor on the assigned date.

## **University Policies and Procedures**

### **Students with Disabilities (ADA Compliance):**

#### Chapter 7(7.004) Disability Accommodations for Students

The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodations must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Disability Services Office website at <http://www.untdallas.edu/disability>. You may also contact them by phone at 972-338-1777; by email at [UNTDisability@untdallas.edu](mailto:UNTDisability@untdallas.edu) or at Building 2, room 204.

#### Blackboard Learn Accessibility Statement:

University of North Texas at Dallas is committed to ensuring its online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technologies, please contact our ITSS Department. To better assist them, you would want to have the operating system, web browser and information on any assistive technology being used. Blackboard Learn course management system's accessibility statement is also provided:

<http://www.blackboard.com/Platforms/Learn/Resources/Accessibility.aspx>

**NOTE:** Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e. MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

#### **Student Evaluation of Teaching Effectiveness Policy:**

Student's evaluations of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

**Assignment Policy:** (According to the instructor's discretion while working in concert with the division/program's guidelines).

**Exam Policy:** (Online exams and the ability to retake is solely at the instructor's discretion). **NOTE:** Online exams may be proctored on campus per instructor's discretion.

### **Academic Integrity:**

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at

[http://www.untDallas.edu/sites/default/files/page\\_level2/pdf/policy/7.002%20Code%20of%20Academic\\_Integrity.pdf](http://www.untDallas.edu/sites/default/files/page_level2/pdf/policy/7.002%20Code%20of%20Academic_Integrity.pdf) for complete provisions of this code.

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Web-based Plagiarism Detection: Please be aware in some online or hybrid courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.

## **Classroom Policies**

### **Online Attendance and Participation:**

The University attendance policy is in effect for this course. Class attendance in the Blackboard classroom and participation is expected because the class is designed as a shared learning experience, and because essential information not in the textbook will be discussed in the discussion board. Online presence and participation in all class discussions is essential to the integration of course material and your ability to demonstrate proficiency.

Attendance for this online or hybrid course is considered when you are logged in and active in Blackboard, i.e., posting assignments, taking quizzes, or completing Discussion Boards. To maintain financial aid award eligibility, activity must occur before the census date of the session or term of the course. Refer to <http://www.untDallas.edu/registrar> for specific dates. If you are absent/not active in the course shell, it is YOUR responsibility to let the instructor know immediately, upon your return, the reason for your absence if it is to be excused. All instructors must follow university policy 7.005 covering excused absences; however, it is the instructor's discretion, as outlined in the course syllabus, of how unexcused absences may or may not count against successful completion of the course

**Inclement Weather and Online Classes:** Online classes may or may not be effected by campus closures due to inclement weather. Unless otherwise notified by your instructor via e-mail, online messaging, or online announcement, students should assume that assignments are due as scheduled.

### **Online "Netiquette":**

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. Emails, Discussion Board messages and/or any other forms of written communication in the online environment should use proper "netiquette" (i.e., no writing in all caps (usually denotes yelling), no curse words, and no "flaming" messages (angry, personal attacks).

Racial, ethnic, or gender slurs will not be tolerated, nor will pornography of any kind.

Any violation of online netiquette may result in a loss of points or removal from the course and referral to the Dean of Students, including warnings and other sanctions in accordance with the University's policies and procedures. Refer to the Student Code of Student Rights Responsibilities and Conduct at <http://www.untDallas.edu/osa/policies>. Respect is a given principle in all online communication. Therefore, please be sure to proofread all of your written communication prior to submission.

### **Diversity/Tolerance Policy:**

Students are encouraged to contribute their perspectives and insights to class discussions in the online environment. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses

will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Dean of Students as the instructor deems appropriate.

**Technology Requirements:** In order to successfully access the materials in an online or hybrid course, UNT Dallas advises that your computer be equipped with the minimum system requirements.

Blackboard Learn 9.1 is the platform software for this course. Blackboard Learn supports major web browsers such as Windows Internet Explorer, Apple Safari, Mozilla Firefox, and Google Chrome. However, since the latter two are updated continually, some recent versions may not be compatible. If you experience difficulty accessing or using components of the course, try using Internet Explorer. Also, no matter what browser you use, always enable pop-ups. For more information see:

- <http://www.untdallas.edu/dlit/ecampus/requirements>
- [https://help.blackboard.com/en-us/Learn/9.1\\_SP\\_12\\_and\\_SP\\_13/Student/040\\_Browser\\_Support\\_for\\_SP\\_13](https://help.blackboard.com/en-us/Learn/9.1_SP_12_and_SP_13/Student/040_Browser_Support_for_SP_13)
- [https://learn.unt.edu/bbcswebdav/institution/BrowserCheck/check\\_full.html](https://learn.unt.edu/bbcswebdav/institution/BrowserCheck/check_full.html)

**NO CHILDREN OF STUDENTS ARE ALLOWED IN CLASS.** Students are not permitted to leave their children on the UNT Dallas campus unattended. Please be aware of the latest policies concerning children on campus.