

UNIVERSITY OF HOUSTON - CLEAR LAKE
School of Education
TCED 4323.01 Mathematics Methods for EC-6th Grade
Spring 2015
January 20, 2015 – May 11, 2015



UHCL Quality Enhancement Plan (QEP) Motto
Applied Critical Thinking (ACT) for Lifelong Learning and Adaptability

This course has been authorized by UHCL as an Applied Critical Thinking (ACT) Course which means that in addition to learning about the specified course content, students will be engaged with some or all of the Elements of Thought and Universal Intellectual Standards of critical thinking. The objective of an ACT course is to develop the student's ability to become skilled at analysis and evaluation by applying a set of intellectual tools that may be effectively used across all disciplines (as well as to the student's personal life). Based on the Foundation for Critical Thinking model (<http://www.criticalthinking.org/>), critical thinking involves thinking for a *purpose*, asking *questions*, using *information*, applying *concepts*, drawing *inferences and conclusions*, identifying *assumptions*, anticipating *implications and consequences*, and recognizing *points of view*. The Universal Intellectual Standards that are applied to these Elements of Thought of critical thinking in order to develop Intellectual Traits include *clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness*.



Excellence, Innovation
and Leadership in a
Learner-Centered
Community



**University
of Houston
Clear Lake**

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INSTRUCTOR

Dr. Sandra Browning

Suite 3.203.05 Student Services Bldg. Office Phone: 281-283-3503

Office hours: Tuesday 8:00-10:00AM, Wednesday 8:00-10:00AM, Thursday 8:00-10:00AM; other times by appointment (*I serve on several committees which sometime schedule meetings during my office hours. Please call to confirm that I am in before visiting the office.*)

E-mail: browning@uhcl.edu.

Secretary: Gigi Daniels, Suite 3.203 Student Services Bldg. Phone: 281-283-3554

Meeting day and time: Monday 9:00-11:50AM

Building and Room: Arbor Building, Room 1310.06

Blackboard: You are responsible for checking Blackboard once each day. All course communications **MUST** be through Blackboard messaging.

I. Catalog and Course Descriptions

Course Catalog: TCED 4323: Mathematics Methods for EC-6

Prerequisites: MATH 3302 and admission to Teacher Education Program; successful completion of or concurrent enrollment in TCED 4303.

Methods of developing candidates' understanding of mathematics; emphasis on problem solving with manipulative and curriculum materials appropriate for use with EC-6 candidates. Field experiences required.

Course Description: Using a learner-centered approach, this course will utilize lectures, in-class problem solving, readings, videos, field experiences, and hands-on experiences with elementary school materials to

generate class discussion on the teaching of mathematics in EC-6 classrooms. The EC-6 classroom can be viewed as a dynamic academic and social situation requiring teacher candidates to have an in-depth knowledge of mathematical content knowledge as well as mathematical pedagogy knowledge. In the preparation of EC-6 teacher candidates, the focus is to engage candidates in professional and scholarly thinking that develops the ability to analyze the relevance, reasoning, and implications of mathematical instructional decisions. For example, in understanding how to instruct EC-6 students on a mathematics concept, teacher candidates will use various applied critical thinking elements of thought (e.g., using relevant information for planning and implementing best practices, developing logical and reasonable inferences to guide instruction, and developing relevant questioning strategies) in the learning process, which in turn can assist the teacher candidates to developing intellectual traits (e.g., confidence, courage, integrity). **Teacher candidates will use these critical thinking skills to focus on the central question of the course: How can teacher candidates teach mathematics conceptually rather than procedurally?**

II. Student Learning Objectives (SLOs)

Upon completion of TCED 4323, teacher candidates will be able to:

- (1) Clearly explain the *relevant* mathematical methods (*concepts*) and skills for teaching essential elements in the mathematics curriculum expected of Pre-Kindergarten (PK) to 6th grade students.
- (2) Use *relevant evidence (information)* in demonstrating the application of mathematics concepts.
- (3) Demonstrate the ability to draw *logical conclusions* using relevant information.
- (4) Be familiar with the mathematics program components presented in the Texas Essential Knowledge and Skills (TEKS) and National Council of Teachers of Mathematics (NCTM) Standards, as well as the English Language Proficiency Standards (ELPS).
- (5) Write clear, accurate, relevant lesson plans using a prescribed Lesson Plan Format for mathematics at the EC-6 level.
- (6) Create and apply appropriate interactive mathematics activities to foster higher level thinking in children.
- (7) Design activities that utilize appropriate manipulatives to help PK to 6th grade students develop mathematical concepts and skills through *relevant concrete experiences that assist students* in making the transition from the concrete level to the symbolic level and finally, to the abstract level of thinking .
- (8) *Accurately and logically* apply *Bloom's Taxonomy, Erickson's Structure of Knowledge, and Webb's Depth of Knowledge* at the higher levels of difficulty (e.g., analyzing, evaluating) throughout the mathematics curriculum in lesson plan writing and classroom teaching.
- (9) *Accurately and logically* apply *Erickson's Structure of Knowledge* at the higher levels of complexity (e.g., concepts, generalizations) in lesson plan writing and classroom teaching.
- (10) Share a variety of creative ideas for the improvement of the teaching and learning of mathematics.
- (11) Integrate problem-solving situations throughout the mathematics curriculum.

Vocabulary of Critical Thinking

In this course, students will learn and use the vocabulary of critical thinking which will include an understanding and use of both the Elements of Thoughts and the Universal Intellectual Standards.

Elements of Thought*

In this course, many of the eight elements of thought will be practiced:

- (1) Purpose: Goals and Objectives
- (2) Question at Issue: Mathematical strategies and Misconceptions
- (3) Information: Facts, Observations, Experiences
- (4) Concepts: Definitions, Principles and Standards, Strategies
- (5) Interpretation and Inference: Solutions and Conclusions
- (6) Assumptions: Presuppositions
- (7) Implications and Consequences: Effects and Outcomes
- (8) Point of View: Perspectives

Universal Intellectual Standards*

In this course, we will consider and use nine universal intellectual standards including clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness.

*Paul, R., & Elder, L. (2009). *Critical thinking: Concepts and Tools* (6th ed.). Tomales, CA: Foundation for Critical Thinking Press.

4Cs of the Critical Thinking Process

There are four major aspects of the Applied Critical Thinking Process: Curiosity, Connections, Creativity, and Communication. The predominate C in the Student Learning Outcomes is **Connections**.

III. REQUIRED TEXTBOOK, WEBSITES, AND FIELD EXPERIENCES

Required Textbook

Van de Walle, J. A., Karp, K. S., & Bay-Williams, J. M. (2013). *Elementary and Middle School Mathematics: Teaching Developmentally* (8th ed.), Boston: Pearson Education Inc.

This textbook is on reserve in the library.

Websites

English Language Proficiency Standards at <http://ritter.tea.state.tx.us/rules/tac/chapter074/ch074a.html>

National Council of Teachers of Mathematics (NCTM) at <http://www.nctm.org>

State of Texas Assessments of Academic Readiness at <http://www.tea.state.tx.us/student.assessment/taaar/>

Texas Education Agency (TEA) at <http://www.tea.state.tx.us/>

Texas State Board of Educator Certification (SBEC) at <http://www.tea.state.tx.us/index4.aspx?id=3461>

UT Charles A. Dana Center at www.utdanacenter.org

<http://www.lead4ward.com>

Field Experiences

Each candidate will complete three on-site field experiences. The three on-site field experiences will include observing a certified teacher once and teaching two lesson plans in the field using the required lesson plan format. The four on-site field experiences will be in Pasadena ISD at Moore Elementary School, 8880 Southbluff, Houston, Texas 77089, Phone: 713-740-0656, Fax: 713-740-4140, Hours: 7:50 a.m. - 3:05 pm, Principal: Jill Lacamu. Campus assignments for field experiences are subject to change.

In addition, each candidate will write one lesson on a topic assigned by the course instructor using the required lesson plan format and complete a virtual field experience (observing a video of an experienced teacher teaching mathematics) prior to participating in the four on-site field experiences.

Failure to complete any of the following will result in an F in the course: (a) writing all three lesson plans, i.e. LP 1, LP 2, and LP 3, (b) participating in all three (3) on-site field experiences, (c) teaching both lesson plans 2 and 3, and (d) uploading associated documents as indicated in the course calendar will result in an F in the course.

Field Experience Statement

1. Required Formal Approval of School District

No candidate may begin any field experience prior to the formal approval of the school district.

2. Required Criminal Background Check

In accordance with Senate Bill 9, it is required that school districts, charter schools, or private schools conduct criminal background checks on all district employees, any person that is volunteering, or completing any kind of field experience. Each person to whom this applies must provide the school district with driver's license information and any other information necessary to conduct the criminal background check.

For assignments that require either class wide, group participation or activities in which candidates are necessarily interacting with minor students, each candidate must complete the appropriate criminal background check form and submit it to the instructor by the stated due date on the syllabus. In most cases this applies even if the candidate is an employee of the district.

For assignments that require candidates to visit schools (eg., interviews, etc.), it is the responsibility of the candidate to provide the school district, charter school, or private school with any information necessary to conduct a criminal background check. The School of Education accepts no responsibility for candidates who do not follow established school district, charter school, or private school procedures or state legislation.

3. Failure to Complete Field Experiences

If a candidate is unable to complete all required field experiences (regardless of the reason, including failing to have a formally approved criminal background check), then the candidate will not receive credit for the course; i.e., the candidate must drop the course or will receive an F in the course.

Guidelines for Field Experiences

- Dress professionally.** You may not wear shorts, jeans, leggings, short skirts, or plunging necklines. Your top should be long enough that your midriff is not exposed at any time even if your arms are raised. You will be expected to follow the dress code of the school district where you are doing your field experience. You will not be allowed to teach your lesson and will be sent out of the school if the dress code is not followed. Your field experience must be rescheduled, and you will receive a zero on professionalism on the SoE Disposition Form (see pages 15-16).
- Time:** It is a waste of the mentor teacher's time to keep her class waiting. Tardiness for a field experience will result in a zero on professionalism on the SoE Disposition Form. Please note, you are required to remain

with your mentor teacher or another teacher approved by your mentor for a minimum of 90 minutes each field experience.

3. **Give a copy of your lesson plan and a copy of the lesson evaluation to your mentor teacher each time you teach a lesson.**
4. If a situation arises on the day of the field experience and you are not able attend the field experience, call the school as soon as possible. It is unprofessional when a student does not show up for a field experience and does not notify the mentor teacher.
5. You must make up a missed field experience within **two** week of the original day, or you will receive a zero on the lesson plan and **an F in the course**. This remake must be approved by both the classroom teacher and the course instructor. **You must cc your instructor on all email with the classroom teacher related to the missed field experience.**
6. Wear your UHCL ID as a name tag. Bring your driver's license so that it can be scanned for security. **Failure to provide a driver's license will result in a missed field experience. See guidelines for rescheduling field experience above.**
7. Public school students may not chew gum, so it is inappropriate for UHCL candidates to chew gum on site. It is unprofessional and unattractive to chew gum and teach. If you chew gum, your grade on the lesson plan that you are teaching will be lowered.
8. Check with the mentor teacher before you use any food. The state of Texas has issued guidelines about food that may be offered to students. Some students are allergic or diabetic. **No candy is to be used for a lesson or given to the students.**
9. Do not ask to use the copy machine at the field experience school. All of your materials should be prepared before you arrive at the school.
10. **Be absolutely certain that your cell phone is turned off before you enter the public school building.** Most public schools have a policy stating that all cell phones must be turned off when the students are in the classroom. **Your grade will be lowered one letter grade and you will receive a zero on professionalism on the SoE Disposition Form if your cell phone rings while you are in the building for your field experience (see pages 15-16).**

IV. ASSIGNMENTS

NOTE: Any alterations to the course outline, assignment overview, or calendar schedule are at the discretion of the instructor. Students will be notified of changes in advance.

Due dates for assignments are established in the course calendar.

Guidelines for Assignments

- a) All assignments must be uploaded into Blackboard by midnight (11:55 PM) of the due date.
- b) All assignments must be uploaded using the appropriate label that includes first name, last name and name of assignment, example **sandrabrowning_lessonplan3**. **Failure to upload in this format will result in a letter grade deduction in grade for the assignment.**
- c) **No assignments will be accepted via email or in class.**
- d) All written assignments must be typed, double spaced and in Times New Roman 12 point font in a **Microsoft WORD document. No other format will be accepted.** Assignments will be graded on content, format, spelling, punctuation, and grammar. Make use of the UHCL Writing Center for assistance if necessary.
- e) All assignments must have name, course and section number placed in upper left hand corner, example **Sandra Browning
TCED 4323.01**

Failure to upload each assignment in this format may result in a five (5) point deduction in the grade for the assignment.

In **TCED 4303 Creating Positive Learning Environments**, you received detailed information on how to write lesson plans. You also received detailed information on how to cite information using APA style. Refer to this document for APA style. In case you do not have that information or are unsure about how to cite sources using APA format, contact the Writing Center, the UHCL Library or visit the following sites:

<http://apastyle.apa.org/> or <http://owl.english.purdue.edu/owl/resource/560/01/>

Course materials and handouts are found on Blackboard. Candidates are responsible for downloading and printing all necessary materials prior to each class.

1. A mid-term exam and a final exam will be given. Tests will cover textbook, class work, handouts, videos, class demonstrations, and classroom discussions. You will be responsible for anything discussed in class. **You will need one blue Scantron sheet from the UHCL bookstore for the midterm and one for the final. If you do not take the Midterm Exam at the scheduled time, you will take this exam during the final**

week of class at a time convenient to the instructor. If you do not take the Final Exam at its scheduled time, you must complete this exam by the Friday of finals week at a time convenient to the instructor.

2. Critical thinking skills stated in SLO 1, 2, and 3 will be used in developing the three (3) lesson plans using the TCED 4323 Lesson Plan Format located in the Forms folder in Blackboard will be written. Lesson Plan 1 will not be taught to students in elementary school but will be evaluated by the candidate and the professor. Lessons Plans 2 and 3 will be taught in the designated elementary school. **Note that the TEKS and ELPS must be addressed in all components of the Lesson Plan.** Grades on each lesson plan will be determined by the initial submission of the lesson plan graded according to the lesson plan scoring rubric (see Appendix). However, you will not be allowed to teach a lesson plan unless the instructor has evaluated it, revisions have been made, and the lesson is approved to be taught. The revised lesson plan must be submitted by **Thursday at noon, prior to the Monday when the lesson will be taught. If this deadline is not met you will not be allowed to teach on Monday and will have to reschedule the field experience.**

You must make up a missed field experience before you receive credit for the written lesson plan. These lesson plans and all supporting documents are to be uploaded as one document to the assignment section of Blackboard by midnight (11:55 PM) on the due date. If multiple documents are uploaded, I will choose one document at random to grade as the lesson plan.

Each corresponding Lesson Reflection will also be uploaded to the assignment section of Blackboard by midnight (11:55 PM) on the due date. Mentor teacher's evaluation of lessons should be scanned and uploaded by midnight (11:55 PM) on the due date.

Failure to write lesson plans 1, 2, and 3 and to teach each of the two (2) lesson plans, Lesson Plan 2 and Lesson Plan 3, will result in an F in the course. (Creativity, Connections, Communication)

4. You will complete a STAAR assessment in Blackboard and a STAAR assignment. (Curiosity and Connection)
5. In your assigned group, you will research an assigned manipulative and write a three to five page paper concerning the history and uses of the assigned manipulative.
6. Technology Integration. You will present activities from assigned chapters from the textbook. These activities will be manipulative-based and include virtual manipulatives. This is a group project. Groups will be determined by the professor, and group members will rate each other. The class will complete a rubric rating each presentation during the presentations. The presentations will be uploaded into the discussion section of Blackboard **and** the assignment dropbox by midnight (11:55 PM) of the due date and presented to the class on a date determined by the professor. (Connections, Creativity, Communication)
7. Virtual Field Experience. You will review a video posted in blackboard and complete the associated reflection paper. The reflection must be a minimum of three pages. (Connection)
8. Submissions to the discussion board concerning chapter readings will be scheduled throughout the semester.
9. Podcast. You will listen to six podcasts posted in blackboard. The information from the podcast will be on the midterm and final but will not be discussed in class.
10. Other work may be assigned during the semester.
11. **DESIGNATED COURSE ASSESSMENT.** You will upload:
 - (a) Lesson Plan of your choice (Lesson Plan 2 or 3) (b) the corresponding lesson plan rubric completed by your instructor, and (c) the complete two-page evaluation form from your mentor.

These will be uploaded as **one** document to the **University Assessment System (UAS)** on the SOE webpage: <http://prtl.uhcl.edu/portal/page/portal/SOE/PCT> following the instructions from <http://prtl.uhcl.edu/portal/page/portal/SOE/PCT>. **If the Designated Course Assessment is not uploaded as one document, 5 points will be deducted from your semester grade.**

Label the document: firstnamelastname_lessonplan3_UAS

In the UAS, lesson plan grades of 95 or higher will be evaluated as excellent. Grades of 94-80 will be evaluated as acceptable. Lesson plan grades less than 80 will be evaluated as unacceptable.

Documentation of the UAS lesson plan upload must be uploaded into Blackboard by the due date. **You will not be allowed to take the final exam if documentation of the UAS lesson plan upload is not provided in Blackboard. If LP 2 OR LP 3 with the graded rubric from the course instructor and the complete evaluation form from the mentor is not uploaded into UAS by the date of the final exam, your final grade for the course will be lowered by ONE FULL LETTER grade.**

ALL ASSIGNMENTS MUST BE UPLOADED AS ONE DOCUMENT INTO BLACKBOARD BY THE DUE DATE STATED IN THE COURSE CALENDAR.

TENTATIVE COURSE CALENDAR

NOTE: Alterations to the course outline, assignment overview, or calendar schedule are at the discretion of the instructor. Students will be notified of changes in advance.

Class 1: January 26, 2015

Introduction, Code of Ethics, UHCL Standards, Completion of background check forms, Syllabus, Sample Lesson Plan, NCTM Strands
Virtual Field Experience explanation
Class Project Explanation
Rubric for Grading Lesson Plans

Begin writing Lesson Plan 1: Will be done as a group and address the TEKS assigned

Read Chapter 1: Teaching Mathematics in the 21st Century

Read Chapter 2: Exploring What It Means to Know and Do Mathematics

TEExES Competencies: 012.01, 012.04, 012.07, 012.12

UHCL Standards: 1.1

NCTM Standards: 2, 3, 4, 12, 13, 14, 15, 16

Class 2: February 2, 2015

(1) **Due: STAAR assignment**

(2) **Quiz 1 over readings in textbook**

Read Chapter 3: Teaching through Problem Solving

Read Chapter 4: Planning in the Problem-Solving Classroom

Continue preparing Lesson Plan 1

Competencies: 015.01, 015.02, 015.03, 015.07

UHCL Standards: 1.1, 2.1

NCTM Standards: all

Class 3: February 9, 2015

(1) **Due: Manipulative Paper on Assigned Manipulative and Assigned TEKS**

(2) **Due: Virtual Field Experience report (Field Experience 1); 3 page minimum**

(3) **Quiz 2 over readings in textbook**

Read Chapter 5: Building Assessment into Instruction

Read Chapter 6: Teaching Mathematics Equitably to All Children

TEExES Competencies: 012.01

UHCL Standards: 2, 3, 3, 5.4

NCTM Standards: 2, 3, 4, 5.4

Class 4: February 16, 2015

(1) **Due: Lesson Plan 1**

(2) **Due: Presentation of Activities, Chap 8, 9, 10**

(3) **Quiz 3 over readings in textbook**

Read Chapter 8: Developing Early Number Concepts and Number Sense

Read Chapter 9: Developing Meanings for the Operations

TEExES Competencies: 013.01, 013.04, 015.07

UHCL Standards: 2, 3, 4

NCTM Standards: 2, 3, 4, 5, 12, 13, 14, 15, 16

Class 5: February 23, 2015

Field Experience 1: Teacher Observation - Class meets at Moore Elementary School

Read Chapter 10: Helping Children Master Basic Facts

Read Chapter 11: Developing Whole-Number Place-Value Concepts

TEExES Competencies: 012.01

UHCL Standards: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.5, 2.6, .1, 3.2, 3.3, 3.4, 4.1, 4.3, 4.4, 4.5, 4.6

NCTM Standards: 1, 2, 3, 4, 12, 13, 14, 15, 16

Class 6: March 2, 2015

(1) **Due: Teacher Observation 1 Report; 3 page minimum, do not use spacing larger than double-spacing or margins greater than 1 inch.**

(2) **Due: Documentation that Diversity Information has been submitted to UAS**

(3) **Due: Lesson Plan 2**

(4) **Due: Presentation of Activities, Chap 11, 12**

(5) **Quiz 4 over readings in textbook**

Read Chapter 12: Developing Strategies for Addition and Subtraction Computation

Read Chapter 13: Developing Strategies for Multiplication and Division Computation

TEExES Competencies: 013.02, 013.04,

UHCL Standards: 1.1, 2.1

NCTM Standards: 1, 2, 3, 4, 5, 12, 13, 13, 15

Class 7: March 9, 2015

MIDTERM EXAM

Read Chapter 14: Algebraic Thinking:

Generalizations, Patterns, and Functions

Spring Break March 16-22

Class 8: March 23

Field Experience 2: Teach LP 2 Class meets at Moore Elementary School

Read Chapter 15: Developing Fraction Concepts

Read Chapter 16: Developing Strategies for Fraction Computation

TEExES Competencies: 013.02, 015.05, 015.07

UHCL Standards: 1.1, 2.1

NCTM Standards: 2, 3, 4, 5, 7, 12, 13, 14, 15,

Class 9: March 30, 2015

(1) **Due: Lesson Plan 2 Reflection; 3 page minimum**

(2) **Due: Mentor Evaluation of Lesson 2**

(3) **Due: Presentation of Activities, Chap 13, 14**

(4) **Quiz 5 over readings in textbook**

Read Chapter 17: Developing Concepts of Decimals and Percents

Read Chapter 18: Proportional Reasoning
TEExES Competencies: 012.01
UHCL Standards: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.5, 2.6, .1, 3.2, 3.3, 3.4, 4.1, 4.3, 4.4, 4.6
NCTM Standards: 1, 2, 3, 4, 5, 12, 13, 14, 15

Class 10: April 6, 2015

(1) Due: Presentation of Activities, Chap 15, 16

Read Chapter 19: Developing Measurement Concepts

Read Chapter 20: Geometric Thinking and Geometric Concepts

TEExES Competencies: 013.05, 013.06, 013.07, 013.08, 013.10

TEExES Competencies: 014.01, 014.03, 014.06

UHCL Standards: 1.1, 2.1

NCTM Standards: 1, 2, 3, 4, 5, 9, 12, 13, 14, 15

Class 11: April 13, 2015

(1) Due: Lesson Plan 3

(2) Due: Presentation of Activities, Chap 17, 18

(3) Quiz 6 over readings in textbook

Read Chapter 21: Developing Concepts of Data Analysis

TEExES Competencies: 013.02, 013.03, 014.02, 014.04, 014.05, 014.07

UHCL Standards: 1.1, 2.1

NCTM Standards: 1, 2, 3, 4, 5, 7, 10, 12, 13, 14, 15, 16

Class 12: April 20, 2015

(1) Due: Presentation of Activities, Chap 19, 20

(2) Quiz 7 over readings in textbook

Read Chapter 22: Exploring Concepts of Probability

TEExES Competencies: 012.01, 012.02, 012.05, 012.07

UHCL Standards: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 4.1, 4.3, 4.4, 4.5, 4.6

NCTM Standards: 1, 2, 4, 5, 12, 13, 14, 15, 16

Class 13: April 27, 2015

Field Experience 3: Teach LP 3 Class meets at Moore Elementary School

(1) Due: Documentation that LP2 or LP3 has been uploaded into UAS.

Explanation of Final Exam expectations

Read Chapter 23: Developing Concepts of Exponents, Integers, and Real Numbers

TEExES Competencies: 014.08, 014.09, 014.10

UHCL Standards: 1.1, 2.1

NCTM Standards: 1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 16

Class 14: May 4, 2015

(1) Due: Presentation of Activities, Chap 21, 22

(2) Quiz 8 over readings in textbook

(3) Due: Lesson Plan 3 Reflection; 3 page minimum

(4) Due: Mentor Evaluation of Lesson 3

TEExES Competencies: 012.01, 012.02, 012.05, 012.07

UHCL Standards: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.2, 2.3, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 4.1, 4.3, 4.4, 4.5, 4.6

NCTM Standards: 1, 2, 3, 4, 5, 12, 14, 15, 16

Class 15: May 11, 2015

Final Exam

COURSE POLICIES

Attendance: Because so much of the learning associated with this class takes place through hands-on activities during the class session, **attendance at all class sessions is required** Attendance is defined as presence and participation in class discussions and activities. There will be a sign in sheet for you to sign as you walk into each class. **It is your responsibility to sign in each day.** If you arrive late and do not sign in, it will count as an absence. Absences are not classified as excused or unexcused. **If you are not in class, you are absent. Notifying the instructor does not excuse the absence or late arrivals/early departures.**

A frequently asked question is: **“I (or my kids) have a doctor’s appointment/are sick and I am not going to be in class today. Will this absence count against me?”**

Yes, you will be counted absent for any class you miss regardless of the reason. Please refer to the attendance policy.

The grade is affected as follows:

Absences:	3	Semester grade drops 10 points
0-2	No change	> 4 Grade is “F”.

Arriving more than fifteen (15) minutes after the scheduled class beginning time is considered a late arrival. Leaving class before being dismissed by the instructor is considered an early departure. Two late arrivals or early departures or one of each will count as one absence.

Unprofessional or disruptive behavior in class or in the field will affect course grades and result in a zero (0) on the School of Education disposition form (see pages 15-16).

Grade Determination: The course grade will be determined as follows:

Assignments	Percentage of Semester Grade
Teacher Observation	4%
Lesson Plan 1	8%
Lesson Plan 2	10%
Lesson Plan 2 Reflection	4%
Lesson Plan 2 Mentor Evaluation	1%
Lesson Plan 3	10%
Lesson Plan 3 Reflection	4%
Lesson Plan 3 Mentor Evaluation	1%
Technology Integration (Virtual Manipulatives-Chapter Presentations)	5%
Manipulative Paper	5%
Virtual Field Experience	5%
STAAR Assignment	5%
Midterm Exam	19%
Final Exam	19%

Grade Distribution:

A	93-100	B+	87-89	C+	77-79	D+	67-69	F	<60
A-	90-92	B-	80-82	C-	70-72	D-	60-62		

Late Work Policy: A late Lesson Plan will result in a 20% grade reduction for each day the lesson plan is late. All other late assignments are subject to a 10 % grade reduction for each day that the assignment is late. **No assignments will be accepted after being seven (7) days late.**

Missed Field Placements must be made up. If you must miss a Field Placement due to an emergency:

- 1) Call the school and the mentor teacher
- 2) Contact your professor/instructor
- 3) Call your UHCL student partner(s)
- 4) Contact your mentor teacher to set up another day/time to teach or observe. This cannot be done on a scheduled class day. If you work, you will need to arrange with your employer to be off from work that day. Reschedule your missed experience during the same week or the following week so you can stay on top of your assignments (see late work policy). Once your mentor teacher has agreed to a date and time for the field experience, inform your instructor of the date and time. **You must have instructor approval for you to reschedule your placement. Failure to complete the three (3) on-site field experiences as indicated in the course calendar will result in an F in the course.**

- ✓ You must submit documentation that the diversity information has been submitted in UAS prior to the midterm exam. **You will not be allowed to take the midterm exam if this is not submitted.**
- ✓ You must submit documentation that Lesson Plan 2 or Lesson Plan 3 has been submitted to UAS prior to the final exam. **You will not be allowed to take the final exam if this is not submitted.**

Texting or talking on phone in class is not professional behavior and will be reflected in the disposition score. As you come to class all cell phones should be turned off and put away. You will receive a zero on professionalism on the SoE Disposition Form if your cell phone is not put away during the entire class (see pages 15-16). To become familiar with appropriate behavior during faculty meetings, preservice teachers should consider methods instructors as campus principals and exhibit the appropriate behavior and respect.

National Council of Teachers of Mathematics Standards

For additional information on the NCTM standards, see pages 1-5 of course text.

NCTM Principles

1. Equity
2. Curriculum
3. Teaching
4. Learning
5. Assessment
6. Technology

NCTM Content Standards

1. Numbers and Operations
2. Algebra
3. Geometry
4. Measurement
5. Data Analysis and Probability

NCTM Process Standards

1. Problem Solving
2. Reasoning and Proof
3. Communication
4. Connections
5. Representation

Disposition Statement

Each student must read and follow [Statement on Professional Dispositions](#), which is provided to define the standard of behavior SOE expects of candidates.

As a CAEP accredited institution, UHCL only recommends for certification those persons who have demonstrated the necessary dispositions associated with the professional educator. Regardless of academic record, a student may be withdrawn from a UHCL program if judged to lack the required professional dispositions.

The Statement on Professional Dispositions contains the definition for professional dispositions. At the end of the course and at other times, instructors assess compliance with the standards. These assessments are invaluable for professional development.

6 Drop Rule

Students who entered college for the first time in fall 2007 or later should be aware of the course drop limitation imposed by the Texas Legislature, which specifies:

1. Dropping this or any other course between the first day of class and the census date for the semester/session does not affect your 6 drop rule count.
2. Dropping a course between the census date and the last day to drop a class for the semester/session will count as one of your 6 permitted drops.

Students should take this into consideration before dropping this or any other course. Reference: [UHCL Academic Records](#) for [6 Drop Rule](#) details and the [Academic Calendar](#) for census date information.

Academic Calendar

[Academic Calendar](#) [2014-2015 Academic Affairs Administration Calendar](#)

UAS Statement

Every student in a field based course must log into the UAS and complete the Diversity Survey. Written documentation of completion of the Diversity Survey must be provided prior to taking the midterm exam. You will not be allowed to take the final exam if documentation of the UAS Lesson Plan upload is not provided in Blackboard. If LP 2 OR LP 3 with the graded rubric from the course instructor and the complete evaluation form from the mentor is not uploaded into UAS by the end of the semester, your final grade for the course will be lowered by ONE FULL LETTER grade.

Every student in a course with a designated Course Assessment must complete and submit the assignment to the School of Education (SOE) Unit Assessment System (UAS) following the [Student UAS instructions](#) (pdf). Instructors assign each Course Assessment assignment to one of three UAS categories:

- Excellent
- Acceptable
- Unacceptable

Course Assessment assignment scores do not contribute to a student's grade and are only used to determine how well the program supports SOE candidates, meets State Standards, and fulfills national accreditation requirements.

Americans with Disabilities Statement

If you believe you have a disability requiring an accommodation, contact [Disability Services](#) at 281-283-2648 or disability@uhcl.edu as soon as possible and complete their registration process.

The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students with a disability. In accordance with Section 504 and ADA guidelines,

each University within the System strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them.

English Language Proficiency (ELPS)

Pursuant to Texas Education Agency policy and based on the fact that Texas has so many English language learners in the public school classrooms, there is the expectation to be familiar with the English Language Proficiency Standards. Those standards will be assessed on the Pedagogy and Professional Responsibilities TExES (the PPR). After reading the [ELPS standards](#), please raise any questions in class.

TEA Matrix Statement

Using [TEA's Pedagogy and Professional Responsibilities Course Correlation TAC](#) and familiarize yourself with TEA's 17 Curriculum Topics and how the courses in your EC – 6 Certification Program align with those topics. UHCL's School of Education was re-accredited in 2010 by the Texas Education Agency. The TEA Matrix shows how our courses align with TEA's 17 Curriculum Topics for the Pedagogy and Professional Responsibilities TExES. The alignment between our courses and the 17 topics is so strong that it was recommended that we should make the curriculum items transparent to the teaching candidates.

As a requirement for this course, you are to go to

http://prtl.uhcl.edu/portal/page/portal/SOE/Forms/form_files/TEA_Matrix.pdf and familiarize yourself with TEA's 17 Curriculum Topics and how the courses in your EC – 6 Certification Program align with those topics.

Student Success Center

The Student Success Center is a comprehensive academic support resource for the UHCL student community. The Center's services are free of charge and include peer tutoring for courses in all four schools, supplemental instruction, and study skill counseling. Students can visit the Student Success Center webpage at <http://www.uhcl.edu/studentssuccesscenter> or call 281-283-2643 to review our services and set appointments.

The Math Center provides drop in tutoring for students enrolled in mathematics courses. Anytime the math center is open a tutor will be available to help you with your coursework. We have study rooms and space available for you to study in addition to whiteboards and computers available on a first come, first serve basis. The Math Center also can provide assistance with questions concerning the mathematics portion of the Generalist EC-6 examination. Please check our website at uhcl.edu/math-center for current hours.

Academic Honesty Policy

The [Academic Honesty Policy](#) (pdf) in the [Student Life Policies Handbook](#), is the university community's standard of honesty and is endorsed by all members of the UHCL academic community. It is an essential element of the University's academic credibility. It states:

I will be honest in all my academic activities and will not tolerate dishonesty.

Academic Honesty Code Violations can include (but are not limited to):

1. Acquiring information:
 - a. Acquiring information for any assigned work or examination from any source not authorized by the professor.
 - b. Working with another person or persons on any assignment or examination when not specifically permitted by the instructor.
 - c. Observing the work of other students during any examination.
 - d. Using, buying, selling, stealing, soliciting, copying, or possessing, in whole or part, the contents of an un-administered examination.
 - e. Purchasing, or otherwise acquiring and submitting as one's own work any research paper or other writing assignment prepared by others.
2. Providing information:
 - a. Providing answers for any assigned work or examination when not specifically authorized by the instructor to do so.
 - b. Informing any person or persons of the contents of any examination prior to the time the examination is given.
3. Plagiarism:
 - a. Incorporating the work or idea of another person into one's own work without acknowledging the source of that work or idea.
 - b. Attempting to receive credit for work performed by another person, including papers obtained in whole or part from individuals or other sources.
4. Conspiracy: Agreeing with one or more persons to commit any act of academic dishonesty.
5. Fabrication of information:

- a. Falsifying the results obtained from a research or laboratory experiment.
 - b. Presenting results of research or laboratory experiments without the research or laboratory experiments having been performed.
 - c. Substituting for another student to take an examination or to do any academic work for which academic credit will be received.
 - d. Changing answers or grades after an academic work has been returned to the student and claiming instructor error.
 - e. Submitting work for credit or taking an examination and employing a technique specifically prohibited by the instructor in that course, even if such technique would be acceptable in other courses.
6. Failure to report: Failing to report to the instructor any incident in which a student witnesses an alleged violation of the Academic Honesty Code.

Students who commit an Academic Honesty Code Violation in this course will be penalized with the following penalties, at minimum:

1st offense – Zero on the assignment with no opportunity to “make-up” the assignment

2nd offense – Immediate failure of the course

STANDARDS

UHCL Initial Certification Standards

STANDARD ONE-Knowledge of the Subject Matter

The candidate demonstrates depth and breadth of content knowledge and skills that are aligned with national, state or district standards.

Through an ongoing reflective process, the candidate is able to:

- 1.1 exhibit depth and breadth of accurate content knowledge, skills and dispositions
- 1.2 provide relevant content of the discipline being taught, including concepts, principles, relationships, methods of inquiry and key issues
- 1.3 use appropriate content strategies and materials, including media and technology, which guide learners to construct knowledge, increase understanding of subject matter and move to higher levels of thinking
- 1.4 implement instruction that makes connections within the discipline and across disciplines
- 1.5 use a variety of resources, including technology, to stay abreast of current content knowledge and skills and meet district, state and national standards
- 1.6 analyze the Texas Essential Knowledge and Skills (TEKS) for the level of thinking in relation to the knowledge, skills and disposition of the discipline.

STANDARD TWO-Professional Responsibility and Ethics

The candidate fulfills professional roles and responsibilities, adheres to legal and ethical requirements of the profession and demonstrates the dispositions necessary to be an outstanding educator.

Through an ongoing reflective process, the candidate is able to:

- 2.1 demonstrate the dispositions necessary for an educator who adheres to legal and ethical requirements of the profession
- 2.2 collaboratively create a learning environment that reflects local, state, or national standards
- 2.3 plan educational experiences for all learners, considering developmental, cultural, linguistic, gender and socioeconomic characteristics
- 2.4 exhibit ongoing professional improvement through a commitment to life long learning
- 2.5 use technology and information from professional resources relevant to the field of teaching
- 2.6 know and demonstrate the content, pedagogical, and professional knowledge, skills, and dispositions necessary to help all students learn.

STANDARD THREE –Curriculum, Instruction & Assessment

The candidate creates, organizes and implements developmentally appropriate curriculum, instruction and assessment that are consistent with current pedagogy, content knowledge and skills.

Through an ongoing reflective process, the candidate is able to:

- 3.1 select instructional goals and objectives that are aligned with district, state and national standards
- 3.2 use technology and other resources in planning and implementing instruction and assessment
- 3.3 plan lessons and use a variety of instructional and assessment strategies for diverse learners

- 3.4 design instruction that is relevant and actively engages the learner
- 3.5 design instruction based upon the analysis of results of multiple methods of performance-based assessments of student learning
- 3.6 apply an understanding of environmental and developmental factors that may affect student learning to improve instruction
- 3.7 incorporate relationships among and within concept-based integrated units of various disciplines
- 3.8 provide timely and accurate evidence of student progress and achievement to students and parents/guardians

STANDARD FOUR-Learning Environment & Classroom Management

The candidate is a leader and collaborative member of a learner-centered community in which an atmosphere of trust and openness produces a stimulating exchange of ideas, encourages risk-taking, and promotes feelings of mutual respect.

Through an ongoing reflective process, the candidate is able to:

- 4.1 create a learning environment that fosters a positive climate of equity and excellence to meet the needs of a diverse student population
- 4.2 maintain a productive learning environment that consistently implements rules and procedures for the effective management of time, materials, personnel and technology to maximize learning for all students
- 4.3 establish a secure, safe, predictable environment
- 4.4 use strategies to establish an effective classroom routine through effective communication strategies, the modeling of respectful behavior and encouragement of self-directed learning
- 4.5 create a stimulating learning environment that promotes independent and cooperative learners who are self-disciplined and motivated
- 4.6 generate corrective measures for students' inappropriate behavior
- 4.7 collaborate with parents, supervisors, and administrators to arrive at corrective measures for students' inappropriate behavior.

STANDARD FIVE-Family & Community Involvement

The candidate establishes and uses strong positive relationships among students, families, colleagues, schools and community to support the needs of all learners. The candidate fosters the development of caring citizens in their community and in a global society.

Through an ongoing reflective process, the candidate is able to:

- 5.1 demonstrate an understanding of the family, community, school, and classroom factors that may affect learning
- 5.2 establish strong, positive relationships among students, families, colleagues, schools and community through effective professional and interpersonal
- 5.3 use a variety of resources, including technology, to enhance communication and collaboration with students, families, colleagues and the community
- 5.4 make positive contributions to the school, school district and community that foster the development of caring citizens in the community and a global society
- 5.5 develop learning opportunities that involve families and the community to support and enhance instruction and the educational environment of the school.

State Standards: TExES Competencies for Mathematics, 191 Generalist EC - 6

Competency 012 (Mathematics Instruction): The teacher understands how children learn mathematical skills and uses this knowledge to plan, organize, and implement instruction and assess learning.

The beginning teacher:

- .01 Plans appropriate activities for all children based on research and principles of learning mathematics
Elementary and Middle School Mathematics: Teaching Developmentally
- .02 Employs instructional strategies that build on the linguistic, cultural, and socioeconomic diversity of children and that relate to children's lives and communities. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .03 Provides developmentally appropriate instruction along with a continuum from concrete to abstract and plans instruction that builds on strengths and addresses needs. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .04 Knows how mathematical learning may be assisted through the appropriate use of manipulatives and technological tools. *Elementary and Middle School Mathematics: Teaching Developmentally* and activities covered in TCED 4233

- .05 Motivates children and actively engages them in the learning process by using a variety of interesting, challenging, and worthwhile mathematical tasks by providing instruction in individual, small-group, and large-group settings. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .06 Uses a variety of tools (e.g., counters, standard and nonstandard units of measure, rulers, protractors, scales, stopwatches, measuring containers, money, calculators, software) to strengthen children's mathematical understanding. (Activities covered in TCED 4233)
- .07 Develops appropriate learning goals based on the Texas Essential Knowledge and Skills (TEKS) in mathematics and uses these learning goals as a basis for instruction. <http://www.tea.state.tx.us/>
- .08 Helps children make connections between mathematics, the real world, and other disciplines. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .09 Uses a variety of questioning strategies to encourage mathematical discourse and to help children analyze and evaluate their mathematical thinking. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .10 Uses a variety of formal and informal assessments and scoring procedures to evaluate mathematical understanding, common misconceptions, and error patterns. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .11 Understands the reciprocal nature of assessment and instruction and knows how to use assessment results to design, monitor, and modify instruction to improve mathematical learning for individual children, including English Language Learners. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .12 Understands how mathematics is used in a variety of careers and professions and plans instruction that demonstrates how mathematics is used in the workplace.

Competency 013 (Number, Concepts, Patterns, and Algebra): The teacher understands concepts related to numbers and number systems and demonstrates knowledge of patterns, relations, functions, and algebraic reasoning.

The beginning teacher:

- .01 Analyzes and describes number concepts (e.g., odd, even, prime), operations and algorithms, and the properties of numbers. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .02 Analyzes, explains, and models the four basic operations with whole numbers, integers, and rational numbers. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .03 Uses numbers to describe and quantify phenomena such as time, temperature, and money. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .04 Applies knowledge of place value and other number properties to perform mental mathematics and computational estimation. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .05 Illustrates relations and functions using concrete models, tables, graphs, and symbolic expressions. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .06 Understands how to use algebraic concepts and reasoning to investigate patterns, make generalizations, formulate mathematical models, make predictions, and validate results. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .07 Knows how to identify, extend, and create patterns using concrete models, figures, numbers, and algebraic expressions. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .08 Uses properties, graphs, and applications of relations and functions to analyze, model, and solve problems in mathematical and real-world situations. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .09 Translates problem-solving situations into expressions and equations involving variables and unknowns. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .10 Models and solves problems, including proportion problems, using concrete, numeric, tabular, graphic, and algebraic methods. *Elementary and Middle School Mathematics: Teaching Developmentally*

Competency 014(Geometry, Measurement, Probability, and Statistics): The teacher understands concepts and principles of geometry and measurement and demonstrates knowledge of probability and statistics and their applications.

The beginning teacher:

- .01 Applies knowledge of spatial concepts such as direction, shape, and structure. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .02 Identifies and uses formulas to find lengths, perimeters, areas, and volumes of basic geometrical figures. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .03 Uses mathematical reasoning to prove geometric relationships. *Elementary and Middle School Mathematics: Teaching Developmentally*

- .04 Understands measurement as a process, methods of approximation and estimation, and the effects of error on measurement. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .05 Understands the use of numbers and units of measurement for quantities related to temperature, money, percents and speed. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .06 Uses translations, rotations, reflections, dilations, and contractions to illustrate similarities, congruencies, and symmetries of figures. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .07 Applies knowledge of conversions within and between different measurement systems. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .08 Understands how to use graphical and numerical techniques to explore data, characterize patterns, and describe departure from patterns. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .09 Understands the theory of probability and its relationship to sampling and statistical inference and knows how statistical inference is used in making and evaluating predictions. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .10 Supports arguments, makes predictions, and draws conclusions using summary statistics and graphs to analyze and interpret one-variable data. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .11 Knows how to generate and use probability models to represent situations. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .12 Uses the graph of the normal distribution as a basis for making inferences about a population.

Competency 015(Mathematical Process): The teacher understands mathematical processes and knows how to reason mathematically, solve mathematical problems, and make mathematical connections within and outside of mathematics.

The beginning teacher:

- .01 Understands the role of logical reasoning in mathematics and knows methods and uses of informal and formal reasoning. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .02 Applies correct mathematical reasoning to derive valid conclusions from a set of premises.
- .03 Applies principles of inductive reasoning to make conjectures and uses deductive methods to evaluate the validity of conjectures.
- .04 Evaluates mathematical arguments and recognizes examples of fallacious reasoning.
- .05 Understands connections among concepts, procedures, and equivalent representations in areas of mathematics (e.g., algebra, geometry). *Elementary and Middle School Mathematics: Teaching Developmentally*
- .06 Understands how mathematics is used in other disciplines and in daily living. *Elementary and Middle School Mathematics: Teaching Developmentally*
- .07 Knows how to use mathematical manipulatives and a wide range of appropriate technological tools to develop and explore mathematical concepts and ideas. *Elementary and Middle School Mathematics: Teaching Developmentally* and Activities covered in class in TCED 4233
- .08 Demonstrates knowledge of the history and evolution of mathematical concepts, procedures, and ideas.
- .09 Recognizes the contributions that different cultures have made to the field of mathematics and the impact of mathematics on society and cultures.

University of Houston Clear Lake School of Education Disposition Assessment Form

Candidate: _____

Course: _____

Instructions: Please provide the appropriate score using the following criteria:

- 0=Unacceptable (difficulty or inconsistency in demonstrating this disposition)
- 1= Needs improvement (demonstrates this disposition with reasonable consistency)
- 2= Acceptable (consistent demonstration of this disposition)
- NA= Not able to observe

UHCL candidates are expected to:

Rating

Dispositions	<i>Demonstrate professional responsibility by, for example,</i>	
	Being present, punctual and prepared for professional and academic activities. Maintaining confidentiality of student records and private communications. Being involved in professional development activities. Committing to being a lifelong learner and reflective practitioner. Maintaining professional competence. Meeting professional obligations. Using language that meets professional standards. Using self-reflection to improve performance.	
	<i>Foster collegiality by, for example,</i>	
	Responding constructively to evaluations by supervisors and others making appropriate corrections to address legitimate concerns. Using positive conflict resolution techniques. Maintaining positive working relationships. Collaborating with colleagues to improve student achievement Showing respect for fellow students, faculty and staff. Actively participating in meetings and conferences. Assisting others when necessary.	
	<i>Embrace diversity by, for example,</i>	
	Adapting instruction to individual differences. Demonstrating that diversity in the classroom and society is a strength. Instructing with lessons which counteract negative stereotypes and bigotry. Providing students with access to varying points of view. Using language that is not demeaning or harmful to any individual or group.	
	<i>Demonstrate commitment to learning by, for example,</i>	
	Displaying enthusiasm for the candidate's chosen teaching field(s) or professional role. Creating a learning environment which enables students to fulfill their potential. Being an advocate for all learners. Adapting instruction to "best practices." Displaying creativity to enhance the instructional process.	
	<i>Maintain professional and personal integrity by, for example,</i>	
	Adhering to the UHCL honesty code. Maintaining ethical and legal behaviors in interactions with others. Adhering to the Code of Ethics and Standard Practices for Texas Educators. Maintaining professional relationships.	

Note: The items under each disposition help provide clarity and are not intended to be a comprehensive list of expected behaviors.

IF YOU ASSIGNED A "0", PLEASE COMPLETE PAGE 2

Page 2

If any criterion is rated unacceptable (“0”), fully describe the rater’s concern in the box below:

Below are spaces for you, as the Rater, to sign and date the form. The candidate is also to sign and date the form. The candidate’s signature means only that she or he is aware of the concern described above. It is not an indication that she or he agrees with the concern. If the candidate refuses to sign below, then just write in the date (in the first date line below) that the candidate refused to sign, then sign and date the form.

Candidate’ Name: _____

Candidate’s Signature: _____ Date:_____

Rater’s Name: _____

Rater’s Signature: _____ Date:_____

**When Page 2 is Completed, Forward the Entire Form
to the
Office of the Associate Dean**

Appendix

Lesson Plan Scoring Rubric

Student Learning Objectives 1, 2, and 3.

- (1) *Clearly explain the relevant mathematical methods (concepts) and skills for teaching essential elements in the mathematics curriculum expected of Pre-Kindergarten (PK) to 6th grade students.*
- (2) *Use relevant evidence (information) in demonstrating the application of mathematics concepts.*
- (3) *Demonstrate the ability to draw logical conclusions using relevant information.*

All references to “teacher” pertain to the candidate.

Components	Unacceptable	Acceptable	Excellent
Student Population	1) Identification of student population is incomplete 2) Achievement levels are not fully identified	1) Grade level accurately identified 2) Achievement levels identified	1) Achievement levels accurately identified 2) Grade level is accurately identified 3) Demonstrates awareness of special needs of learners when appropriate
Materials/Resources	1) Essential materials not listed 2) Essential resources not listed	1) Most materials listed 2) Most resources listed	1) Complete listing of materials 2) Complete list of resources precisely identified
Safety (If not appropriate to the lesson, give maximum points.)	1) Safety is appropriate to the lesson, but is not sufficiently addressed 2) No mention of technological safety that may be needed	1) Safety is addressed and takes into consideration all safety aspects of the lesson 2) Identifies some technological considerations regarding safe use of the Internet with students if appropriate	1) Safety is thoroughly addressed 2) Identifies technological considerations regarding safe use of the internet with students and provides avenues to avoid improper use of technology with students if appropriate
TEKS/TAKS (Texas Essential Knowledge and Skills)	1) Not identified or incomplete 2) Not appropriate for grade level or content 3) Does not contain number or fully stated 4) Does not match objective	1) Complete with number and fully stated 2) Appropriate for grade level and content 3) Matches objective	1) Clearly and accurately identified 2) Complete with number and fully stated 3) Appropriate for grade level and content 4) Connects to learning objective 5) Contains both subject-specific and technology TEKS when appropriate 6) Integration of two or more subject areas when appropriate

Components	Unacceptable	Acceptable	Excellent
Instructional Objective(s)	1) Not appropriate for content or time 2) Not developmentally appropriate 3) Not stated in specific, measurable terms 4) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery 6) Does not clearly explain the <i>relevant</i> mathematical <i>concepts</i> and skills expected of Pre-Kindergarten (PK) to 6 th grade students.	1) Appropriate for content and time 2) Developmentally appropriate 3) Stated in specific, measurable and observable terms 1) Aligned to lesson assessment 2) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 6) The <i>relevant</i> mathematical <i>concepts</i> and skills expected of Pre-Kindergarten (PK) to 6 th grade students are explained somewhat but not clearly.	1) Objective is stated with clarity in specific, measurable terms 2) Accurately aligned to lesson assessment 3) Developmentally appropriate 4) Appropriate for content and time 5) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate 6) * <i>Clearly</i> explain the <i>relevant</i> mathematical <i>concepts</i> and skills expected of Pre-Kindergarten (PK) to 6 th grade students.
Anticipatory Set	1) Not identified or related to objective 2) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery when appropriate	1) Focuses attention of students on upcoming lesson Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate	1) Focuses attention on the lesson with clarity and piques the students' interest 2) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate
Input or Procedure (Instruction)	1) Incomplete or inaccurate information given 2) Not age-appropriate 3) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery	1) Includes clearly stated and logically sequenced, age-appropriate accurate explanation 2) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 3) Includes modifications for special populations as appropriate	1) Applies effective teaching methods/strategies including clear and effective questioning strategies 2) Includes clearly stated and logically sequenced accurate, age-appropriate explanation using available resources to enhance explanation 3) Applies relevant strategies to integrate problem solving 4) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate 5) Includes modifications for special populations as appropriate

Components	Unacceptable	Acceptable	Excellent
<p style="text-align: center;">Input or Procedure (Modeling)</p>	<ol style="list-style-type: none"> 1) No demonstration of what students will do 2) No multi-sensory support related to lesson 3) No use of resources 4) Learning activities are not student centered 5) No check for understanding of skill or concept 6) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery when appropriate 7) Does not <i>clearly</i> explain the <i>relevant</i> mathematical methods (<i>concepts</i>) and skills for teaching essential elements in the mathematics curriculum expected of Pre-Kindergarten (PK) to 6th grade students. (SLO 1) 8) Does not use <i>relevant evidence (information)</i> in demonstrating the application of mathematics concepts. (SLO 2) 9) Does not demonstrate the ability to draw <i>logical conclusions</i> using relevant information. (SLO 3) 	<ol style="list-style-type: none"> 1) Demonstrates what the students will do providing some kind of sensory support related to the lesson including only one of the following: 2) Provides multi-sensory support related to the lesson using resources (pictures, maps, charts, dramatizations, demonstrations of processes, or any other visual assists, including technology when appropriate) 3) Integrates multicultural and interdisciplinary components when appropriate 4) Learning activities are student centered 5) Check for understanding to ensure students are progressing towards mastery of the skill or concept 6) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 7) Includes modifications for special populations as appropriate 8) Explain some but not all of the <i>relevant</i> mathematical methods (<i>concepts</i>) and skills for teaching essential elements in the mathematics curriculum expected of Pre-Kindergarten (PK) to 6th grade students. (SLO 1) 9) Use some but not all <i>relevant evidence (information)</i> in demonstrating the application of mathematics concepts. (SLO 2) 10) Demonstrate the ability to draw some bit not all <i>logical conclusions</i> using relevant information. (SLO 3) 	<ol style="list-style-type: none"> 1) Applies effective teaching methods/strategies including clear and effective questioning strategies 2) Demonstrates what the students will do providing some kind of sensory support related to the lesson including both of the following: 3) Provides multi-sensory support related to the lesson using resources (manipulatives, pictures, maps, charts, dramatizations, demonstrations of processes, or any other visual assists, including technology when appropriate) 4) Integrates multicultural and interdisciplinary components when appropriate 5) Applies learning activities that are student centered to foster higher level thinking 6) Check for understanding to ensure students are progressing towards mastery of the skill or concept 7) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate 8) Includes modifications for special populations as appropriate 9) Applies relevant strategies to integrate problem solving 10) <i>Clearly</i> explain the <i>relevant</i> mathematical methods (<i>concepts</i>) and skills for teaching essential elements in the mathematics curriculum expected of Pre-Kindergarten (PK) to 6th grade students. (SLO 1) 11) Use <i>relevant evidence (information)</i> in demonstrating the application of mathematics concepts. (SLO 2) 12) Demonstrate the ability to draw <i>logical conclusions</i> using relevant information. (SLO 3)

Components	Unacceptable	Acceptable	Excellent
Guided Practice	<ol style="list-style-type: none"> 1) Provides minimal practice of lesson skill incorporating the use of learner-centered technology when appropriate 2) Varied learning styles are not addressed 3) No direct supervision by teacher 4) All students are not involved 5) No check for understanding of skill or concept 6) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery when appropriate 	<ol style="list-style-type: none"> 1) Provides adequate practice of lesson skill incorporating the use of learner-centered technology when appropriate 2) At least two learning styles are addressed when appropriate 3) Minimal teacher supervision provided 4) All students are involved 5) Check for understanding to ensure students are progressing towards mastery of the skill or concept 6) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 7) Includes modifications for special populations as appropriate 	<ol style="list-style-type: none"> 1) Applies learning activities that are student centered to foster higher level thinking 2) Applies effective teaching methods/strategies including clear and effective questioning strategies 3) Provides extensive and/or highly creative practice of lesson skill incorporating the use of learner-centered technology when appropriate 4) All learning styles are addressed when appropriate 5) Adequate teacher supervision provided 6) All students are involved 7) Check for understanding to ensure students are progressing towards mastery of the skill or concept 8) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate 9) Includes modifications for special populations as appropriate
Independent Practice (Independent of Teacher)	<ol style="list-style-type: none"> 1) Does not match stated objectives, modeling and/or guided practice 2) No use of technology when appropriate 3) No modifications 4) Provides no or unclear directions. 5) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery when appropriate 	<ol style="list-style-type: none"> 1) Matches stated objectives, modeling, and/or guided practice 2) Incorporates the use of learner-centered technology when appropriate 3) Includes modifications for special populations as appropriate 4) Clear directions provided 5) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 	<ol style="list-style-type: none"> 1) Applies learning activities that are student centered to foster higher level thinking 2) Accurately matches stated objectives, modeling, and/or guided practice 3) Incorporates the use learner-centered technology when appropriate 4) Includes modifications for special populations as appropriate 5) Clear and accurate directions are provided 6) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate

Components	Unacceptable	Acceptable	Excellent
Assessment	<ol style="list-style-type: none"> 1) Not identified or assessment does not match stated lesson instructional objective 2) No use of learner-centered technology when appropriate 3) Rubric not included when appropriate 4) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery. 	<ol style="list-style-type: none"> 1) Identified and matches stated lesson instructional objective 2) Use of learner-centered technology when appropriate 3) Grading rubric(s) included when appropriate. 4) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 5) Includes modifications for special populations as appropriate 	<ol style="list-style-type: none"> 1) Accurately identified and matches stated lesson instructional objective 2) Use of learner-centered technology identified when appropriate 3) Applies relevant strategies for assessment (performance assessment, projects, etc.) 4) Detailed grading rubric included when appropriate to analyze student learning 5) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate 6) Includes modifications for special populations as appropriate
Reteach	<ol style="list-style-type: none"> 1) Not addressed or is a repetition of prior approach 2) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery when appropriate 	<ol style="list-style-type: none"> 1) Addressed using new strategies 2) Is aligned with instructional objectives 3) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 	<ol style="list-style-type: none"> 1) Applies new effective teaching methods/strategies including clear and effective questioning strategies 2) Is aligned with instructional objectives 3) Addresses learning styles (auditory, visual, tactile-kinesthetic and intelligence) when appropriate 4) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate
Enrichment Extension	<ol style="list-style-type: none"> 1) Not addressed or is a repetition or prior instruction 2) More of the same (more problems-another worksheet, etc.) 3) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery when appropriate 	<ol style="list-style-type: none"> 1) Addressed using new strategies 2) Requires students to extend or transfer knowledge and/or skills acquired. 3) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate 	<ol style="list-style-type: none"> 1) Requires students to extend or transfer knowledge and/or skills acquired 2) Students create product to be shared when appropriate 3) Applies new effective teaching methods/strategies including clear and effective questioning strategies

Components	Unacceptable	Acceptable	Excellent
Closure	1) Not identified 2) Teacher tells them what they have learned 3) Not connected to objective(s) 4) No student involvement 5) Technology not appropriately used to promote mastery of the lesson objective or to assess mastery	1) Identified 2) Addresses stated objective(s) 3) Includes student participation 4) Teacher use of technology to promote mastery of the lesson objective or to assess mastery when appropriate	1) Identified 2) Clearly and accurately addresses stated objective(s) 3) Includes student participation 4) Connects to real-life and/or future learning 5) Student use of technology to promote mastery of the lesson objective or to create a product that will be used to assess mastery when appropriate

Note: Two points will be deducted for each spelling and grammar error.