

# University of Houston Clear Lake



**School of Education Motto**  
**Excellence, Innovation and Leadership in a Learner-Centered Community**

**TCED 4323**  
**Spring 2016**

**UHCL Quality Enhancement Plan (QEP) Motto**  
**Applied Critical Thinking 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*.



**CAEP:** UHCL is one of only 14 universities in Texas accredited by the Council for the Accreditation of Educator Preparation (CAEP). [CAEP](#) is a non-profit, non-governmental alliance of 33 national professional organizations recognized by the U. S. Department of Education as an accrediting body of schools, colleges, and departments of education. Meeting CAEP accreditation standards helps to ensure high quality teacher, specialist, and administrator preparation. Through the process of accreditation, CAEP works to make a difference in the quality of P-12 education.

**TCED 4323.04 Mathematics Methods for EC-6/ Spring 2015**  
**January 19-May 3, 2016**

**INSTRUCTOR**

Dr. Sue Brown

Pearland Campus, Office 116 Office Phone: 281-283-3536

Office hours: Tuesday 12-1 and 3:50-4:50; Wednesday 2-4 p.m.; others by appointment

E-mail: [browns@uhcl.edu](mailto:browns@uhcl.edu)

Secretary: Sharon Klein, Suite Bayou 1119, Phone: 281-283-3540

**Meeting day and time:** Tuesday, 1:00-3:50 p.m.

**Building and Room:** Pearland Campus, Room 116

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

**COURSE INFORMATION**

**Title:** TCED 4323.04, Mathematics Methods for EC-6

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

**Prerequisites:** MATH 3032/1351, admission to Teacher Education Program, and completion 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, Applied Critical Thinking (ACT) in the context of FCT's *Elements of Thought* and *Universal Intellectual Standards* works to develop the *Intellectual Traits*. For example, in understanding how to instruct EC-6 students on a mathematics concept, teacher candidates use various applied critical thinking elements of thought (e.g., questioning strategies, principles, assumptions, and inferences) in the learning process; which in turn can assist the teacher candidates to developing intellectual traits (e.g., confidence, courage, integrity).

**Central Questions to Guide Learning:**

**What do I need to know to teach mathematics to EC-6 students to maximize student learning?**

**How can I make effective instructional decisions?**

**I. Student Learning Objectives (SLOs)**

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

- (1) Clearly explain the *relevant* mathematical *concepts* and skills expected of Pre-Kindergarten (PK) to 6<sup>th</sup> grade students. SLO1
- (2) Make sound *inferences* based on relevant *evidence* (information) so as to draw logical *conclusions* (interpretations and inferences) when applying mathematics concepts in teaching essential elements of the math curriculum. SLO2

- (3) Consistently uses relevant evidence (information) to write clear, accurate, relevant lesson plans (*concepts*) using a prescribed Lesson Plan Format for mathematics at the EC-6 level. SLO3
- (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, Pedagogy and Professional Responsibilities (PPR), Texas Teacher Evaluation and Support System (TTESS), Texas Examinations of Educator Standards (TEXES) Core Subjects EC-6 mathematics, University of Houston-Clear Lake Initial Standards as well as the English Language Proficiency Standards (ELPS).
- (5) Create and apply appropriate interactive mathematics activities to foster higher level thinking in children.
- (6) Design activities that utilize appropriate manipulatives to help PK to 6<sup>th</sup> 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 .
- (7) *Accurately and logically* apply *Costa's Taxonomy* at levels 2 and 3 throughout the mathematics curriculum in lesson plan writing and classroom teaching.
- (8) Identify relevant information that is required in order to set forth precise recommendations for meeting the TEKS.
- (9) Share a variety of creative ideas for the improvement of the teaching and learning of mathematics.
- (10) 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 Thought and the Universal Intellectual Standards.

#### Elements of Thought:\*

In this course, we will consider and use eight (8) elements of thought including

1. **Purpose:** Goals and objectives
2. **Question at Issue:** Problem, issue, and misconception
3. **Information:** Facts, data, evidence, observations, reasons, and experiences
4. **Interpretation and Inference:** Solutions and conclusions
5. **Concepts:** Definitions, models, laws, theories and principles
6. **Assumptions:** Axioms, presuppositions, and a-priori facts or knowledge
7. **Implications and Consequences:** Inferences, effects, and outcomes
8. **Point of View:** Perspectives, frames of reference, and orientations

#### Universal Intellectual Standards:\*

In this course, we will consider and use nine (9) universal intellectual standards including clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness.

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

#### 4Cs of Critical Thinking Process

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

**Methodology:** 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.

**Objectives:** Upon completion of TCED 4323, you will be able to:

- (11) Identify the mathematical concepts and skills taught in grades PK-6.

- (12) Examine the components of the mathematics program presented in Texas Essential Knowledge and Skills (TEKS) and the NCTM Standards.
- (13) Utilize effective methods for teaching those essential elements in the mathematics curriculum.
- (14) Utilize appropriate manipulatives to help students develop mathematical concepts and skills through concrete experiences.
- (15) Design activities, which will assist students in making the transition from the concrete level to the symbolic level and finally, to the abstract level of thinking.
- (16) Integrate problem-solving situations throughout the mathematics curriculum.
- (17) Create appropriate mathematical activities to foster higher level thinking in children.
- (18) Share a variety of creative ideas for the improvement of the teaching and learning of mathematics.

**Required Text:** *Elementary and Middle School Mathematics: Teaching Developmentally*, John A. Van de Walle, Karen S. Karp, Jennifer M. Bay-Williams, Ninth Edition, Pearson Education Inc. 2016

### 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/staar/>  
 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.utdanacenter.org)  
 Lead4ward at <http://www.lead4ward.com>  
 Project Share Interactive math glossary at <http://www.projectsharetexas.org/resources/interactive-math-glossary>  
 Unpacking the TEKS at [www.gpisd.org/Page/21894](http://www.gpisd.org/Page/21894)  
 Pedagogy and Professional Responsibilities (PPR) at [tea.texas.gov/WorkArea/DownloadAsset.aspx?id=2147484798](http://tea.texas.gov/WorkArea/DownloadAsset.aspx?id=2147484798)  
 Texas Teacher Evaluation and Support System (TTESS) at [http://tea.texas.gov/Texas\\_Educators/Educator\\_Evaluation\\_and\\_Support\\_System/Texas\\_Teacher\\_Evaluation\\_and\\_Support\\_System/](http://tea.texas.gov/Texas_Educators/Educator_Evaluation_and_Support_System/Texas_Teacher_Evaluation_and_Support_System/)  
 Texas Examinations of Educator Standards (TExES) Core Subjects EC-6 mathematics at [http://cms.texas-ets.org/files/6614/1027/0774/core\\_subjects\\_ec\\_6\\_291.pdf](http://cms.texas-ets.org/files/6614/1027/0774/core_subjects_ec_6_291.pdf)  
 University of Houston-Clear Lake Initial Standards, see syllabus before Academic Calendar

**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 mathematics lesson plan format. The three on-site field experiences will be in Pearland ISD at Barbara Cockrell Elementary School, 3500 McHard Road, Pearland, TX 77581, Phone: 832-736-6600. You instructor will be at Barbara Cockrell with you for each field experience and will observe you as you teach lesson plan 2 and lesson plan 3. After each on-site field experience, class will resume at the UHCL Pearland campus. 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, and (c) teaching both lesson plans 2 and 3.**

### **Guidelines for Field Experiences**

1. 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.
2. **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 both the school and your instructor 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 emails 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.** Many 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.**

### **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.

## 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 **suebrown\_lessonplan3**. **Failure to upload in this format may 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

**Sue Brown**  
**TCED 4323.04**

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.

The following assignments must be submitted in Blackboard in Assignments. Assignments not submitted in Blackboard Assignments will not be graded and will result in a zero for the assignment. Please note that assignments must be submitted within seven days of the due date. The assignment dropbox in Blackboard will be closed at the end of the seventh day and will not be reopened.

2. SLO 1, 2, and 3 Assessment

Three (3) lesson plans using the TCED 4323 Lesson Plan Format located in Blackboard will be written and taught. 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 at Cockrell Elementary School. Please 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. 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 Tuesday when the lesson will be taught. If this deadline is not met do not come to Cockrell on Tuesday. You will not be allowed to teach on Tuesday and will have to reschedule the field experience and your grade on the lesson plan will be **reduced by 50%**. For example, if your initial lesson plan grade was 90 and you did not submit your revised lesson plan by Thursday at noon, your grade on this lesson plan will be changed to 45.

In writing your lesson plan you will be given a TEKS by your classroom mentor teacher and are expected to make sound inferences based on relevant evidence (information) so as to draw logical conclusions when applying mathematics concepts in teaching the TEKS. Your lesson plan (concepts) will be clear, accurate, and use the prescribed Lesson Plan Format for mathematics at the EC-6 level. Your lesson plan will document how you will *clearly* explain the *relevant* mathematical *concepts* and skills expected of students for the assigned TEKS.

Information on lesson plans will be discussed in class, but please note that no component of the lesson plan can require internet access. Any component of the lesson plan requiring the internet or the use of a document camera will receive a grade of 0. It is not appropriate to expect to enter classrooms and inform the teacher that you will use the computer or document camera in your lesson.

You must make up a missed field experience within two weeks before you receive credit for the written lesson plan. These lesson plans and all supporting documents are to be uploaded as one document in Blackboard Assignments 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 Blackboard Assignments 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 Lesson Plan 2 and Lesson Plan 3, will result in an F in the course.

3. You will complete a STAAR assessment in Blackboard and a STAAR reflection. Information on the assignment is posted in Blackboard.
4. Virtual Field Experience. You will choose one video from the videos posted under the category Virtual Field Experience. You will watch and review one video posted in Blackboard and complete the associated reflection paper. The reflection paper will include the questions specific to the video you choose and your responses. The reflection must be a minimum of three pages.
5. Technology Integration. You will present two mathematics specific digital tools. One must address either concept instruction or problem solving and the other must address drill/reinforcement. See page 135 of the text for additional information. On the first day of class you will be assigned a date for your presentation.
- 6. DESIGNATED COURSE ASSESSMENT.** You will upload: Lesson Plan of your choice (Lesson Plan 2 or 3), the corresponding lesson plan rubric completed by your instructor, and the complete evaluation 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 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 upload is not provided in Blackboard. If LP 2 OR LP 3 with the graded rubric from the course instructor 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.**

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

### 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/studentsuccesscenter> 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/mathcenter](http://uhcl.edu/mathcenter) for current hours or call 281-283- 2643 to review our services and set appointments.

### 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 19**

Introduction, Code of Ethics, UHCL, PPR, TExES, NCTM and TTESS Standards, Completion of background check forms, Syllabus, Sample Lesson Plan, **Virtual Field Experience explanation**  
Students will complete online criminal background check for Pearland ISD

#### **Lesson Plan Example**

**Read Chapter 1: Teaching Mathematics in the 21<sup>st</sup> Century**

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

TExES 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: January 26**

Students will choose dates for Technology Integration Presentation

**Due: Virtual Field Experience report**

**Read Chapter 3: Teaching through Problem Solving**

**Read Chapter 4: Planning in the Problem-Solving Classroom**

TExES Competencies: 015.01, 015.02, 015.03, 015.07

UHCL Standards: 1.1, 2.1

NCTM Standards: all

#### **Class 3: February 2**

**Due: STAAR report**

**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

**Class 4: February 9**

**Class meets at Cockrell Elementary School (Observe)**

**Due: Lesson Plan 1**

**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, 7, 12, 13, 14, 15, 16

**Class 5: February 16**

**Due: Teacher Observation 1 Report**

**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, 5, b7, 12, 13, 14, 15, 16

**Class 6: February 23**

**Due: Lesson Plan 2**

**Screen shot documenting that you have completed the Manage Field Experience drop down menu in UAS. This form documents the diversity of students in the elementary class you are observing/teaching.**

**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, 015.05, 015.07

UHCL Standards: 1.1, 2.1

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

Class 7: **March 1**

**Due: Revised Lesson Plan 2**

**Midterm Exam**

**Class 7: March 8**

**Class meets at Cockrell Elementary School (Teach lesson plan 2)**

**Read Chapter 14: Algebraic Thinking: Generalizations, Patterns, and Functions**

TEExES Competencies: 013.02, 015.05, 015.07

UHCL Standards: 1.1, 2.1

NCTM Standards: 2, 3, 4, 5, 8, 12, 13, 14, 15, 16

**Class 9: March 15**

**Due: Lesson Plan 3**

**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, 16

**Class 10: March 22**

**Due: Lesson Plan 2 Reflection**

**Due: Mentor Teacher Evaluation of Lesson 2**

**Read Chapter 17: Developing Concepts of Decimals and Percent's**

TExES 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, 16

**Class 11: March 29**

**Due: Lesson Plan 3 Revised**

**Read Chapter 19: Developing Measurement Concepts**

TExES Competencies: 014.02, 014.04, 014.05, 014.07

UHCL Standards: 1.1, 2.1

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

**Class 12: April 5**

**Class meets at Cockrell Elementary School (Teach lesson plan 3)**

**Read Chapter 18: Proportional Reasoning**

TExES Competencies: 013. 10

UHCL Standards: 1.1, 2.1

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

**Class 13: April 12**

**Due: Lesson Plan 3 Reflection**

**Due: Mentor Teacher Evaluation of Lesson 3**

**Read Chapter 20: Geometric Thinking and Geometric Concepts**

TExES Competencies: 012.01, 012.03, 012.06,

UHCL Standards: 1.1, 2.1

NCTM Standards: 1, 2, 3, 4, 5, 9, 12, 13, 14, 15, 16

**Class 14: April 19**

**Due: Screen shot documenting that you have uploaded the lesson plan of your choice (lesson plan 2 or 3), the corresponding lesson plan rubric completed by your instructor, and the complete evaluation from your mentor as one document in UAS.**

**Chapter 20: Geometric Thinking and Geometric Concepts Continued**

TExES Competencies: 012.01, 012.03, 012.06,

UHCL Standards: 1.1, 2.1

NCTM Standards: 1, 2, 3, 4, 5, 9, 12, 13, 14, 15, 16

**Class 15: April 26**

**Read Chapter 21: Developing Concepts of Data Analysis**

TExES Competencies: 014. 08, 014.10

UHCL Standards: 1.1, 2.1

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

**Class 16: May 3 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:     0-1    No change  
                   2     Semester grade drops 5 points  
                   3     Semester grade drops 10 points  
                   ≥ 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.**

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

Lesson Plans and implementation	38%
Technology Integration	10%
Teacher Observation	4%
Virtual Field Experience	5%
STAAR	5%
Midterm Exam	19%
Final Exam	19%

**Points for Each Assignment**

Assignment	LP1	LP2	LP2 Reflec- -tion	LP2 Mentor Evalu- -tion	LP3	LP3 Reflec- -tion	LP3 Mentor Evalu- -tion	Virtual Field Experi- -ence	Techno- logy Integ- -ration	Teacher Obser- -vation	STAAR Report	Mid- -term	Final
<b>Points</b>	8	10	4	1	10	4	1	5	7	4	8	19	19

**Grade Distribution:**

	B+	87-89	C+	77-79	D+	67-69	F <60
A	93-100	B	83-86	C	73-76	D	63-66
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 regardless of the reason. 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) Call 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 during math methods class time. 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 to reschedule your placement. Failure to complete the three on-site field experiences as indicated in the course calendar will result in an F in the course.

You must complete the Manage Field Experience drop down menu in UAS prior to the midterm exam. You must submit Lesson Plan 2 or 3 to UAS prior to the final exam.

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.** 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 5-7 of course text.

<i>NCTM Principles</i>	<i>NCTM Content Standards</i>	<i>NCTM Process Standards</i>
1. Equity	7. Numbers and Operations	12. Problem Solving
2. Curriculum	8. Algebra	13. Reasoning and Proof
3. Teaching	9. Geometry	14. Communication
4. Learning	10. Measurement	15. Connections
5. Assessment	11. Data Analysis and Probability	16. Representation
6. Technology		

### **Dispositions 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.

## UAS Statement

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.

## 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.

## 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](mailto: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.

## Pedagogy and Professional Responsibilities (PPR) Standards

All teachers must meet the standards that address Pedagogy and Professional Responsibilities. Go to the Texas Education Agency Website at

[http://tea.texas.gov/Texas\\_Educators/Preparation\\_and\\_Continuing\\_Education/Approved\\_Educator\\_Standards/](http://tea.texas.gov/Texas_Educators/Preparation_and_Continuing_Education/Approved_Educator_Standards/) and scroll down to "Standards for All Teachers" and click on the "Pedagogy and Professional Responsibilities (EC-Grade 12)" link.

## Texas Teacher Standards

"The State Board for Educator Certification creates standards for beginning educators. These standards are focused upon the Texas Essential Knowledge and Skills, the required statewide public school curriculum. They reflect current research on the developmental stages and needs of children from Early Childhood (EC) through Grade 12."

New rules with regard to the Texas teaching standards have been adopted by the TEA Commissioner. Go to the Texas Education Agency Website at [http://tea.texas.gov/Texas Educators/Preparation and Continuing Education/Approved Educator Standards/](http://tea.texas.gov/Texas_Educators/Preparation_and_Continuing_Education/Approved_Educator_Standards/) and go to [“Approved Educator Standards”](#) and click on the [“Texas Teaching Standards Adopted in Chapter 149”](#) link.

## 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.

### Academic Honesty Policy

#### Academic Honesty

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:

**1<sup>st</sup> offense – Zero on the assignment with no opportunity to “make-up” the assignment**

**2<sup>nd</sup> offense – Immediate failure of the course**

### **Syllabus Disclaimer**

The instructor reserves the right to change the syllabus at any time.

## **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.

## **Academic Calendar**

[Academic Calendar](#) link must be in each syllabus.

**CHECK LINK** [2015-2016 Academic Affairs Administration Calendar \(pdf\)](#) is a more comprehensive calendar with dates important to faculty.

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	<b><i>Demonstrate professional responsibility by, for example,</i></b>	
	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.	
	<b><i>Foster collegiality by, for example,</i></b>	
	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.	
	<b><i>Embrace diversity by, for example,</i></b>	
	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.	
	<b><i>Demonstrate commitment to learning by, for example,</i></b>	
	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.	
	<b><i>Maintain professional and personal integrity by, for example,</i></b>	

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