

**CTEE 4040 A Curriculum Mathematics****I. Descriptive Information**

- A. Course Number and Title: CTEE4040 A– Curriculum Mathematics
- B. Catalog Description: This course includes the principles, current thinking, and approaches to the teaching of elementary school mathematics. It also includes the relationship between pedagogy and mathematical understanding appropriate for the instruction of children in kindergarten through grade six. During this course the students will participate in part of the AMSTI precertification training for schools in the state of Alabama.
- C. Course Credit: Three hours
- D. Prerequisites: This section is restricted to Elementary Education Cohort A.
- E. Intended Audience: Undergraduates who are pursuing Elementary Teacher Certification
- C. Course Credit: Three hours
- D. Instructor: Megan Burton, PhD  
Department of Curriculum and Teaching  
5020 Haley Center  
Phone: (334) 844-8141  
email: [meb0042@auburn.edu](mailto:meb0042@auburn.edu)\* please note that there is another Megan Burton at auburn so ensure you are using the correct email. It is the student's responsibility to ensure the correct address is used.
- F. Location: Haley Center 2414
- G. Office Hours: Wednesday 1-3pm  
Thursday 9:00-11:00  
And by appointment
- H. Class Meeting: Thursday 11-12:50
- I. Block Lab Time: Monday, Wednesday, and Friday, \*7:00-3:00  
*\*Field site time begins and ends with school day*
- J. Lab Location: As assigned

**II. Course Goals and Objectives**

- A. **Goal:** To critically analyze curriculum and the process of teaching and learning mathematics in the elementary grades.
- B. **Objectives**

Students will:

1. Increase their knowledge of current reform in mathematics education (NCTM) in regard to developmentally appropriate curriculum and methods.
2. Recognize the importance of communication skills in themselves and in the children they teach, including strategies for reasoning, problem solving, inquiry and debate.
3. Have knowledge of techniques for using manipulative materials and play as instruments for enhancing development and learning. Recognize and develop lessons that use techniques such as mathematical recreation, manipulative materials, and technology to enhance development and learning.
4. Develop and implement appropriate lessons and curricular materials for the (K-6) classroom that reflect meaningful mathematics and build on prior knowledge.
5. Recognize the importance of special factors that influence learning and how to provide for them.
6. Demonstrate knowledge and ability to plan and use a variety of appropriate individual and group activities that build on student interests and emphasize student participation in a stimulating classroom space.
7. Demonstrate knowledge to be used in selecting, organizing, and evaluating available space, resources, experience and equipment for the elementary curriculum.
8. Teach mathematics to children in real public school (K-6) classrooms using Alabama state guidelines and NCTM Standards, including planning, integration of content areas, implementation, and reflection/evaluation.
9. Demonstrate knowledge of the characteristics of appropriate and effective learner-centered lessons and units that integrate technology, and the resources for enhancing professional growth using technology.

### III. Required Texts and Other Readings

#### **Required Texts:**

Bamberger, H. J., Oberdorf, C. & Schultz-Ferrell, K. (2010). *Math misconceptions: From misunderstanding to deep understanding*. Portsmouth, NH: Heinemann

Chapin, S., O'Conner, C., & Anderson, N. (2009). *Classroom discussions: Using math talk to help students learn 2<sup>nd</sup> ed.* Sausalito, CA: Math Solutions

#### **Required Materials:**

Current copy of TB Test, composition notebook, 2 dvds, mini-DV videotapes if using the LRC digital cameras (one for math and one for science lesson), school pouch with supplies (glue-stick or tape, mini-scissors, mini-colored pencils (12 set), pencil, black ink pen, white out, calculator, protractor, compass), flash drive, COE name-button [See Thomas in LRC for buttons.] Materials needed to construct instructional charts, games, and other teaching resources.

**NCTM 120 DAY FREE MEMBERSHIP**

<http://www.nctm.org/resources/sampler/default.asp>

**Alabama Course Expectations**

<http://www.alsde.edu/html/sections/documents.asp?section=54&sort=3&footer=sections>

#### **Optional Readings**

Burns, M. and B. Tank. (1988) *A Collection of Math Lessons: From Grades 1 through 3*. White Plains, NY: Math Solutions Publications.

Burns, M. (1987) *A Collection of Math Lessons: From Grades 3 through 6*. White Plains, NY: Math Solutions Publications.

**Others Readings found at <http://www.nctm.org/>**

*Principles and Standards for School Mathematics, National Council Of Teachers of Mathematics (NCTM, 2000)*

*Curriculum and Evaluation Standards, National Council Of Teachers of Mathematics (NCTM, 1989)*

*Professional Standards for School Mathematics, National Council Of Teachers of Mathematics (NCTM, 1991)*

*Assessment Standards for School Mathematics, National Council Of Teachers of Mathematics (NCTM, 1995)*

#### IV. Academic Requirements

1. Homework, Class Activities, and Journal:

This course is designed to allow opportunities to ask questions, contribute to class discussion, and share relevant experiences. Therefore, *participation and professionalism are extremely important*. Requirements for acceptable participation include prompt, timely, and consistent attendance; attentiveness; verbal contributions to small group and whole class discussions; reflection of a positive attitude about learning and class participation; and respecting and supporting the needs of others, including the professor. Participation includes completing all assignments which facilitate the class and or cohort experience including displaying materials, sharing teaching ideas and examples of classroom incidents, writing productively and correctly in all written assignments, and bringing in other materials/information as requested. Actively participate in class in ways that reflect your preparation including thoughtful completion of required readings.

You will complete math journal entries that are related to your experiences in the field, readings, activities, and class discussions. They are designed to help you make connections between the readings, mathematical content and your fieldwork. This assignment will be evaluated at the end term using the rubric given at the end of the syllabus (20 points)

2. Math Unit:

Compiled by each student on a mathematical concept or big idea of his or her choice. The unit will include at least ten math activities the student has collected during the semester. It will also include content skills, children's literature, assessments, websites, and a vocabulary list. This unit will be presented to the class at the end of the semester. A rubric for evaluation will be provided. (20 points)

3. Investigations Co-teaching:

Includes joint preparation and implementation of an Investigation lesson from an AMSTI math bundle. The co-teachers will share the lead in teaching this lesson to their peers during class. The

lesson plan for this lesson must be submitted to the instructor at least 24 hours before it is taught in class. A rubric for evaluation will be provided. (20 points)

4. Math Website Assignment:

The webquest activity is designed to provide an opportunity for students to explore virtual manipulatives and other mathematical resources that are available online to support student learning. (10 points)

5. Professional Work Sample:

Includes pre-thinking about a lesson, a lesson plan, videotaped teaching, written and oral observer feedback, evidence of student learning (i.e., assessment, analysis, samples), and written reflection on practice towards continuous improvement. Details of this assignment are given in the *Field Placement Handbook*. **The instructor reserves the right to request additional teachings based on unsatisfactory performance.** (20 points)

6. Student Mathematics Games

Games are a central part of mathematics. Games develop familiarity with the number system, provide opportunity for practicing computation, encourage strategic thinking, develop fluency with numbers, and provide a school to home link. While students play games, the teacher is free to observe student's work or to work with few students individually. You will find at least 4 math games according to constructivist guidelines developed by Kamii (2000). At least one game should be designed for the children you assist this semester. You will choose one game to implement before the due date. You will then prepare a handout describing the purpose and procedure of the 5 games. You will present this handout and summarize your experience in implementing the game. (10 points)

7. Course Performance Conference Form

Completed in conference with the course instructor(s). **Students must make ALL SATISFACTORY marks or comments in both professional areas (Professional Dispositions, Planning and Teaching Practice) by end-term in order to get credit for this course.** Students will be counseled throughout the course if they are not meeting satisfactory expectations before the end-term conference. Course performance includes both on campus AND field performance expectations.

8. Lab Professionalism and Observation Forms

Document your attendance, professional dispositions, and planning and teaching abilities in your field placement. You must meet weekly professional expectations in the field in order to pass this course – no continuous absences (more than 2) and no continuous NO marks on professionalism and teaching indicators. You must also demonstrate your abilities in teaching at the emerging level on all standards and indicators listed on the *EDUCATE Alabama* observation form in order to pass this course. **See the Laboratory Placement Handbook for all lab forms and details.**

## Lesson Plan Format: Mathematics

This should be written so ANY teacher could follow it (2-3 pages). Be sure to include enough details. Include questions for students at a variety of cognitive thinking levels and make sure you include possible answers. Think realistically about the time frame and about movement of materials. Lesson Plans are due to your instructor with your cooperating teacher's signature **AT LEAST 2 DAYS IN ADVANCE** of teaching.

Name:

Date:

Lesson Title:

Grade/School:

Unit Topic:

Lesson Topic:

Alabama State Standards for Math (write out all that apply with applicable bullets for the grade and lesson)

NCTM *Content Skills* and *Process Skills*:

Mathematical Big Ideas:

Learning Objective(s) (1-3, observable, measurable, learning performance; same for assessment; what the students will do...build, describe, observe, measure, identify, etc.)

Materials

Content information (this is background information for the teacher):

Advance Preparation:

Procedure & Time--- [See attached] (Attach a copy of the lesson that includes the step-by-step procedure AND time estimates to implement the lesson, Q.B. you must write it out here so that another teacher could carry out this lesson.)

- Opening (Your *Engage* or *Focus* which accesses prior knowledge and builds student interest)
- Activity (Your *Exploration* of the concept through inquiry and concrete common experience upon which to base new learning)
- New Learning (Your *Explanation* or *Reflection* on learning from the activity; Concept development and learning of new related vocabulary)  
Extension (Your *Extension* or *Application* of new learning through practice, further inquiry, or use in new or real life situations)
- Closing (Your review of learning; student presentation; possible 'formative' assessment)

Evaluation --- [See attached] (Attach a copy of your 'formative' evaluation that directly correlates with the lesson's learning objectives; Use embedded or end-of-lesson evaluation)

Modification for inclusion student(s) (if applicable, describe here; See teacher for suggested accommodations)

Literature (children's books on this topic):

Lesson Source (e.g., website, *Everyday Mathematics*, *Investigations*, etc.)

Supervising Teacher's Signature : ----- Date:

NOTE: Be sure to attach all detailed procedures, worksheets for activities (if applicable), evaluation pieces, and content information that go with this lesson--and likely came from the lesson source.

## The Learning Cycle

### 5-E Model (and FERA Model)

The 5-E Model of the Learning Cycle is one of a number of Learning Cycle models that include three vital elements to help students learn best. Students must encounter concrete experiences upon which they can develop new ideas and concepts. These ideas must be further discussed, interrogated, and guided by a knowledgeable teacher in order to make sense of them in light of what is accepted knowledge. Students strengthen their understanding of new ideas by putting them into practice or applying them to new situations. This is the essence of the Learning Cycle.

**Engage (Focus)** to initiate the learning tasks by accessing prior knowledge and learning experiences and mentally engaging students in the concept, process or skill to be explored

- \*Get their attention.
- \*Ask the 'burning question' that kick-starts this lesson or phase.
- \*Show 'novel' images, materials, stories to begin student thinking.

**Explore (Explore)** to provide a common base of experience within which students identify and develop current concepts, processes or skills. Students use 'active' learning to manipulate materials or explore the environment.

- \*Get students involved in hands-on inquiry that focuses on the engage question. \*Let them try out some of their ideas about this question. \*Help them make observations and gather evidence that supports concept development.

**Explain (Reflect)** to provide opportunities for learners to develop explanations of concepts that they have been exploring. Students must verbalize conceptual understanding, demonstrate skills, and attach formal labels and definitions to new ideas.

- \*This is the traditional "vocabulary" format, but with the added twist that we target vocabulary to build on students' conceptual thinking. \*Get students involved in peer and class discussions on new learning, guiding them to accept scientific ideas. \*Question students' thinking based on new experiences, evidence, or knowledge created.

**Elaborate-Extend (Apply)** to develop in learners deeper and broader understanding and practice, applying newly acquired skills and behaviors to new or practical situations.

- \*Relate what students just learned to social and scientific issues encountered outside of the classroom through further study, inquiries, or projects \*Carry out a lesson that connects this concept with other concepts or ideas already. \*Use the newly learned concept in a new or novel situation.

**Evaluate** or assess students' understanding and abilities so that they can demonstrate what they 'know and can do'. Students are provided frequent opportunities for *formative* assessment, applying new learning, and teacher feedback.

- \*Collect frequent evidence of individual learning from meaningful assignments. \*Rely on embedded assessment to gauge individual learning and performance. \*Check students' understanding and performance in practice through check-sheets, individual questioning, and written drawings and reflections. \*Give opportunity for self-assessment of learning through writing, journals, and peer sharing of thinking.

## V. Administrative Requirements

1. Attendance is required at each class and scheduled lab time. Students who miss class or lab because of illness need a doctor's statement-note for verification of sickness and should clear the absence with the instructor no later than seven days after the absence per university policy. Other unavoidable absences from campus or lab must be documented and cleared with the instructor **in advance**.
  - Excused absences include official and university-accepted documentation. You must also notify your instructor and cooperating teacher whenever possible PRIOR to any missed time. You will be required to make up missed lab time.
  - **At two absences from class students will be required to meet in conference to discuss continuing in this course.** [See Lab Manual for similar lab attendance policy]. Students will be counseled and placed on an attendance contract in order to continue in the course. Expected professional dispositions and performance competencies in this field-based course require students to meet attendance requirements.
  - Ten points will be deducted from the final grade for any unexcused absence from class or lab. **At 2 unexcused absences students will be referred to the Office of Student Affairs to be withdrawn from the course.** Three unexcused tardies will be counted as one unexcused absence. Leaving class early counts as an absence without prior (not same day) approval.
2. As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College's conceptual framework. These professional commitments or dispositions are: Engaging in responsible and ethical professional practices, contributing to collaborative learning communities, demonstrating a commitment to diversity, and modeling and nurturing intellectual vitality. Each student is expected to exhibit courteous, mature, responsible, and professional behavior. This includes not texting messages during class, doing work for another class, not being prepared for class, and talking when someone else – a peer or instructor – is speaking. Students are expected to participate in all class discussions and participate in all exercises in class and outside of class. It is the student's responsibility to contact the instructor if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work.
3. Some assignments will involve integrating readings & websites into your reflections & lessons. Plagiarism is the act of representing words, data, works, ideas, computer program or output, or anything not generated by the student as his or her own. Plagiarism may be inadvertent or purposeful; however, plagiarism is not a question of intent. All suspected incidences of plagiarism must be reported by the course instructor to the Assistant Dean of the College of Education. Plagiarism is considered a serious act of academic misconduct and may result in a student receiving an "F" in the course and being suspended from the University. Please be sure to cite any outside sources used in work. Also all work is to be done individually unless otherwise specified.
4. Use of *Canvas* system, internet, and email for communication and instruction. All assignments must be submitted in either rich text or Microsoft word format unless directions were given to use PowerPoint or Excel. It is the students' responsibility to check the assignment, once submitted, to ensure it went through properly.
5. Students will be expected to demonstrate basic skills in reading, writing, speaking, and mathematics. Assignments that have multiple mathematical, grammatical, or spelling errors will have to be revised correctly at a letter grade point loss.

6. Graded course assignments are due on the assigned date and must be completed in a thorough manner. Major assignments that are incomplete or not done on time will lose points equal to one letter grade for each day late up to three days. All assignments must be completed, whether or not credit is given, in order to pass this course. **Late weekly assignments will not receive credit.**
7. There will be no unannounced quizzes.
8. Students who need special accommodations in class, as provided for by the American Disabilities Act, should arrange a confidential meeting with the instructor during office hours the first week of classes - or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with the Program for Students with Disabilities, 1244 Haley Center, 844-2096.
9. The University Academic Honesty Code and the Tiger Cub Rules and Regulations pertaining to Cheating will apply to this class. Plagiarism policy is strictly enforced.
10. Cell phones need to be turned to off during class and lab experiences. In addition, students should not work on university course assignments that are not field based during their lab experience. During lab experiences students are expected to be fully and actively involved in the classrooms in which they are placed.

### **Expectations: Professionalism**

The following standards will be honored to create a professional learning environment.

1. Attendance and punctuality demonstrate that you value this course. Classroom teachers model these behaviors for their students.
2. It is a good idea to develop a buddy system with others in class in case of unexpected absences. You will need to find out from a classmate what you've missed.
3. Teaching is a field that requires professional reading and reflection. Your thoughtful reading before class, your engaged participation in class discussions and activities, and the positive stance you take in interacting with your instructor and with others in the group are expected.
4. Attend carefully to class presentations and discussions. Professionalism is more than just showing up for class. In this course you will be expected to treat the others in our group with respect and to support their successes. Respect does not mean always agreeing with others. It means allowing others their dignity. It means actively and courteously listening to what others say and responding with your own perspective. It means taking an active role and enhancing others' thinking by sharing your own rough draft thinking as it develops, and by clarifying the reasons that you might "agree to disagree" with others. Developing strong relationships with colleagues is one of the most important things we do as teachers.
5. **As a courtesy to the class, please do not leave on beepers, phones or pagers in class.**
6. As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College's conceptual framework. These professional commitments or dispositions are as follows: (a) engage in responsible and ethical professional practices (b) contribute to collaborative learning communities (c) demonstrate a commitment to diversity (d) model and nurture intellectual vitality.



## VI. Evaluation

| Date Due  | Requirement  | Value             |
|---|--|-------------------|
| All class sessions-<br>final due date is at<br>conference | Homework, Class Activities, and Journal  | 20 points         |
| 3/29  | Math Unit  | 20 points         |
| During AMSTI<br>session- will sign<br>up for time/day     | Investigative Co- teaching   | 20 points         |
| 2/9   | Math Website Assignment  | 10 points         |
| 3/1 part 1<br>3/8 completed                               | Professional Work Sample   | 20 points         |
| 2/20  | Math Games Assignment  | 10 points         |
| Instructor portion<br>completed the<br>week of March 26   | <b>*Course Performance Conference Form<br/>(Satisfactory Performance Required)</b>                   |                   |
| Due Tuesdays by<br>11am                                   | <b>**Weekly Lab Hours &amp; Professionalism Form<br/>(All copies required)</b>                       |                   |
| <i>Final cumulative<br/>report</i>                        | <b>***EducateAlabama Observation Form<br/>(‘Emerging’ Performance Required on all<br/>standards)</b> |                   |
| <i>Total lab<br/>hours/Standards</i>                      | <b>****Summative Lab Evaluation Form</b>   |                   |
|   | <b>Total</b>   | <b>100 points</b> |

**\*Students MUST have satisfactory marks on all areas of the COURSE PERFORMANCE CONFERENCE FORM by the end of this course in order to receive credit for this course.** Students will be counseled throughout the course by written notification (email), and for more serious matters in person (signed letter or contract), if they are not meeting SATISFACTORY expectations on indicators before the end-of-course conference.

**\*\*Meeting weekly attendance, planning, teaching, and professional dispositions in the classroom is required for all field students in this course to show readiness for internship. Students who are not continuously meeting all of these expectations will fail their lab placement and this course. See Lab Placement Handbook.**

**\*\*\*Students must meet professional performance expectations as beginning teachers at the ‘emerging’ level on all Standards and indicators listed on the EDUCATEAlabama Observation Form in order to pass this course. See Lab Placement Handbook.**

**\*\*\*\*Students must meet the total required lab hours and Standards on the EDUCATE Alabama Observation Form in order to pass this course. See Lab Placement Handbook.**

**All assignments must be completed in order to get credit for this course, even if turned in late for less credit.**

The South Carolina Standard Grading Scale will be used to determine grades for this course.

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = below 60 points

## V. Evaluation Rubrics and Details

### 1. Homework, Class Activities, and Journal

| Indicator   | Score |     |   |     |   |
|---|-------|-----|---|-----|---|
| 2= Excellent, 1.5= Good, 1.0= Fair, 0.5= Marginal, 0= Poor  |       |     |   |     |   |
| <i>HOLISTIC</i>   |       |     |   |     |   |
| Table of contents, page numbers, and all entries present  | 2     | 1.5 | 1 | 0.5 | 0 |
| Participates in classroom discussions based on readings in a way that is clear the student has completed readings | 2     | 1.5 | 1 | 0.5 | 0 |
| Participates in classroom activities in professional manner   | 2     | 1.5 | 1 | 0.5 | 0 |
| Completeness of daily entries   | 2     | 1.5 | 1 | 0.5 | 0 |
| Legibility, spelling, grammar, organization, and neatness   | 2     | 1.5 | 1 | 0.5 | 0 |
| <i>ANALYTIC</i>   |       |     |   |     |   |
| Prior knowledge, ideas, brainstorm <i>s (ample thinking)</i>  | 2     | 1.5 | 1 | 0.5 | 0 |
| Explorations, observations, results, graphs <i> (accuracy)</i>  | 2     | 1.5 | 1 | 0.5 | 0 |
| New learning, answered questions <i> (based on evidence)</i>  | 2     | 1.5 | 1 | 0.5 | 0 |
| Notes and terms/vocabulary <i> (defined)</i>  | 2     | 1.5 | 1 | 0.5 | 0 |
| Reflective thinking <i> (in-depth, detailed)</i>  | 2     | 1.5 | 1 | 0.5 | 0 |
| TOTAL SCORE (out of 20 points):   |       |     |   |     |   |

### 2. Math Unit Rubric- To be posted on canvas

| Component                 | Points  |
|---------------------------|---|
| Math Classroom Activities | 10 Points<br>(One point for each activity)  |
| Content                   | 2 Points<br>(At least two entries)  |
| Literature                | 2 Points<br>(At least two sources)  |
| Web Sites                 | 2 Points<br>(At least two addresses)  |
| Vocabulary List           | 2 Points<br>(At least four words and definitions)   |
| Assessments               | 2 Points<br>(At least two forms of evaluation with t least one not being a traditional worksheet or test, but instead performance based, open ended, project based, etc...) |

## 3. Co-Teaching AMSTI Lesson Rubric (20 points)

Partners: \_\_\_\_\_

Lesson: \_\_\_\_\_

| <b>*Performance Indicator [Exemplary, Competent, Needs Improvement, Poor]</b><br><i>Missing procedures or lesson parts are cited where applicable</i> | <b>4</b> | <b>3</b> | <b>2</b> | <b>1</b> |
|---|----------|----------|----------|----------|
| All materials needed for the lesson are prepared and present before the lesson begins.  |          |          |          |          |
| Co-teacher(s) give concise, clear, and logical directions for peers to follow.  |          |          |          |          |
| Co-teacher(s) develop the lesson following the step-wise procedure and teacher information; Not skipping any teaching steps.                          |          |          |          |          |
| Co-teacher(s) question and guide students effectively to facilitate student thinking and sharing.   |          |          |          |          |
| Co-teacher(s) demonstrate appropriate knowledge of the lesson and topic of study.   |          |          |          |          |
| Co-teacher(s) secure students' attention and manage and use time effectively (pacing) to achieve lesson's goals.                                      |          |          |          |          |
| Co-teacher(s) check for task completion through roving and monitor student understanding through active assessment(s).                                |          |          |          |          |
| Co-teachers equally shared meaningful lead teaching roles – no one only monitors or assists students while working.                                   |          |          |          |          |

\*RUBRIC SCORE (out of 16 pts.) = Total Score/2.0

\*RUBRIC SCORE: \_\_\_\_\_

\*\*Cooperative Planning Score (out of 4 points)

\*\*Coop. Score: \_\_\_\_\_

**FINAL SCORE:** \_\_\_\_\_

4. Math Website Assignment- To be completed on Canvas, where details will be posted

5. Professional Work Sample- see field placement handbook

6. Math Games- handout and summary to be posted on canvas, but game that is created will be brought to class (10 points)

Games develop familiarity with the number system, provide opportunity for practicing computation, encourage strategic thinking, develop fluency with numbers, allow student's to communicate with each other, and provide a school to home link. While students play games, the teacher is free to observe student's work or to work with few students individually. You will find at least 4 math games according to constructivist guidelines developed by Kamii (2000). You will then prepare one copy of one game with all materials and clear directions included. In addition you will post a handout on Canvas under assignment that describes all 4 games and summarizes your experience with the 1 game you implemented in class. The handout will describe the purpose and procedure of the games and provide a short summary of your experience with the game. In class we will play the games.

**1. Clearly described purpose of 4 appropriate math games**

**Score: /2**

**2. Clearly described procedure of 4 appropriate math games**

**Score: /2**

**3. Summary of experience with at least one game**

**Score: /2**

**4. Developmentally appropriate construction of knowledge and concepts for students**

**Score: /2**

**5. Professional appearance of game**

**Score: /2**

**Points \_\_\_\_\_/10**

## 7. Course Performance Conference Form

Name: \_\_\_\_\_ Date: \_\_\_\_\_

***Candidates must meet satisfactory expectations in BOTH performance areas for the course (in lab and campus) in order to pass the math course. This form will be used once by cooperating lab teacher and once by instructor. Both copies must be submitted by the final class meeting.***

**PROFESSIONAL DISPOSITIONS**

- Dress, grooming, and demeanor \_\_\_\_
- Attendance and tardiness \_\_\_\_
- Basic communication skills (reading, speaking, writing) \_\_\_\_
- Task completion and timeliness \_\_\_\_
- Self-direction and initiative \_\_\_\_
- Reflective and critical improvement of practice \_\_\_\_

Areas of Strength:

Areas of Concern: *(attach action plan)*

\_\_\_\_ Satisfactory    \_\_\_\_ Unsatisfactory

**PLANNING AND TEACHING PRACTICE**

- Lesson planning and preparation for instruction \_\_\_\_
- Basic knowledge and study of math concepts and principles \_\_\_\_
- Understanding of Standards-based teaching (e.g., inquiry approaches) \_\_\_\_
- Fluency in presentation, directions, and facilitation of lessons \_\_\_\_
- Correction of student or class inappropriate behavior (e.g., not talking over students) \_\_\_\_
- Comfort in interacting with and helping children achieve classroom expectations \_\_\_\_

Areas of Strength:

Areas of Concern: *(attach action plan)*

\_\_\_\_ Satisfactory    \_\_\_\_ Unsatisfactory

***Signatures verify that a conference took place over these performance scores.***

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Instructor / Cooperating Teacher Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Spring 2012 CTEE 4040 C Tentative Schedule**

| Date | Topic     | Readings For Class<br>in this Row | Assignment Due for Class in this Row |
|------|-----------|-----------------------------------|--------------------------------------|
| day  | Reviewing |                                   |                                      |

|                                  |   |   |  |
|----------------------------------|---|---|--|
| Monday<br>January 9<br>3:30      | Syllabus, AMSTI<br>Overview<br>Investigations Co-<br>Teaching<br>Assignments,<br>What is<br>Mathematics?<br>Model Investigation<br>Lesson<br>In class workshop<br>with co-teacher |   |  |
| Tuesday<br>January 11<br>3:30    | Investigation Co-<br>Teaching #1 (First<br>Grade)<br>Investigation Co-<br>Teaching #2 (First<br>Grade)  |   |  |
| Wednesday<br>January 12<br>12:50 | Investigation Co-<br>Teaching #3<br>(Second Grade)<br>Investigation Co-<br>Teaching #4<br>(Second Grade)  |   |  |
| Thursday<br>January 13<br>3:30   | Meet if needed  | 1) Print (or save on an electronic device that you will bring to class each day)<br>a copy of the 2010 Alabama State Math Standards <a href="http://alex.state.al.us/browseMath.php">http://alex.state.al.us/browseMath.php</a><br>2) Bookmark the correlation document to the previous standards:<br><a href="http://www.alsde.edu/html/sections/doc_download.asp?section=54&amp;id=13172&amp;sort=21">http://www.alsde.edu/html/sections/doc_download.asp?section=54&amp;id=13172&amp;sort=21</a><br>3) Book mark Common Core Standards so you may revisit it for homework assignments<br><a href="http://www.corestandards.org/the-standards/mathematics">http://www.corestandards.org/the-standards/mathematics</a> |  |
| Friday<br>January 17<br>1:45     | Investigations Co-<br>Teaching #5 (Third<br>Grade)<br>Investigations Co-<br>Teaching #6 (Third<br>Grade)<br>Investigation Co-<br>Teaching #7<br>(Fourth Grade)                    | Read Chapin Ch 1:<br>Overview   | Select 1-2 sentences that resonated with you. Be prepared to share why<br>you selected these sentences in class. |
| Tuesday<br>January 18<br>2:30    | Investigation Co-<br>Teaching #8<br>(Fourth Grade)<br>Investigation Co-<br>Teaching #9 (Fifth   |   |  |

|                                |   |                               |   |
|--------------------------------|---|-------------------------------|---|
|                                | Grade)  |                               |   |
| Monday<br>January 19<br>12:50  | Investigation Co-Teaching #10 (Fifth Grade)<br>Pulling it together                              |                               |   |
| Monday<br>January 20<br>12:30  | Meet if needed  |                               |   |
| Monday<br>January 26<br>12:50  | 1) Math as a Language<br>2) Knowing your standards: Common Core and Alabama<br>3) Data Analysis | Chapin Ch 2<br>MM Ch 6 Jigsaw | 1) Chapin Select 1-2 sentences that resonated with you. Be prepared to share why you selected these sentences in class.<br>2) Chapin Select one of the discussion and reflection questions on page 45 to answer in your math journal (approximately 1/2- 1page)<br>3) For MM: Be prepared to share what you read in a meaningful way to others who did not read this section. |
| Monday<br>January 31<br>12:50  | Asking Questions<br>Number Sense  | Chapin Ch 3 & 4               | <b>Math Unit Topic Due</b><br>1) For Chapin Ch 3: Complete Discussion and Reflection Question 1 on page 65.<br>2) For Chapin Ch 4: Complete Discussion and Reflection Question 1 or 2 (approximately 1/2 – 1 page)  |
| Monday<br>February 9<br>12:50  | Complete webquest and reflection  | Chapin Ch5                    | <b>Webquest and Reflection due by 1pm on Feb 9 on Canvas</b><br>1) Select one of the discussion and reflection questions on page 108 to answer in your math journal (approximately 1/2- 1page)  |
| Monday<br>February 16<br>12:50 | Computation<br>Lesson Planning  | Jigsaw MM Ch 1<br>Chapin 9    | 1) For MM: Be prepared to share what you read in a meaningful way to others who did not read this section.<br>2) Chapin- Answer discussion question 1   |
| Monday<br>February 20<br>12:50 | Lesson Planning<br>Cont'd<br>Algorithms   | Chapin Ch 7                   | <b>Math Games</b>   |
| Monday<br>February 23<br>12:50 | Assessment<br>Fractions, Percents, Decimals<br>Money  | MM Ch 6<br>Chapin Ch 6        | 1) Select 1-2 sentences that resonated with you from each chapter. Be prepared to share why you selected these sentences in class.  |
| Monday<br>February 27<br>12:50 | Geometry<br>Mathematical terms  | MM Ch 3<br>Chapin Ch 7        | 1) In your math journal create an outline of the chapter and for each content addressed write 1-3 sentences that capture the essence of the section.<br><b>2)PWS Part 1 due</b>   |

|                                       |  |  |  |
|---------------------------------------|--|--|--|
| Friday<br>March 8<br>12:50            | Math Workshop<br>Measurement   | MM Ch 4                                | <b>Math Lesson Plan #2, Video, &amp; PWS Due at office door by 11:00am</b><br>1) Select 1-2 sentences that resonated with you from each chapter. Be prepared to share why you selected these sentences in class. |
| <b>Auburn University Spring Break</b> |  |  |  |
| Friday<br>March 22<br>12:50           | Algebra<br>Differentiation   | Chapin: Case Study<br>1 & 2<br>MM Ch 2 | Answer Question 4 for case study 1 page 234  |
| March 26,<br>& 30                     | <b>Individual<br/>Conferences</b>  |  | <b>Math Journal Due at conference</b>  |
| Friday<br>March 29<br>12:50           | Presentation of<br>Math Units  |  | <b>Math Units Due by 11am</b>  |
| Friday<br>March 5<br>12:50            | Presentation of<br>Math Units  | Chapin: Ch 8                           | Reflect upon how this relates to your experiences in the field<br>(approximately 1 page)   |
| Monday<br>March 9<br>12:30            | AMSTI meet at<br>Center  |  |  |
| Tuesday<br>March 11<br>12:30          | AMSTI meet at<br>Center  |  |  |
| Friday<br>March 12<br>12:50           | 1) Data Analysis<br>and Probability<br>2) Notebooking<br>3) Pulling it All<br>Together | MM Chapter 5<br>Chapin Ch 10           | 1) Chapin Select one of the discussion and reflection questions on page 212 to answer in your math journal (approximately ½- 1page)  |
| Monday<br>March 13<br>12:30           | AMSTI meet at<br>Center  |  |  |
| Monday<br>March 16<br>12:50           | Science and Math<br>on campus  |  |  |
| Friday<br>March 19<br>12:50           |  |  |  |
| Friday<br>March 24<br>12:50           | Science and Math<br>Split  |  |  |

**\*\*This schedule is tentative and made change at instructor's discretion.\*\***



