Instructor: Beth Lloyd, Ph.D.
Office: School of Education, Health, and Human Performance, Room 227
Office Phone: 953-7432
Email: LloydB@cofc.edu
Office Hours: MW: 9:25 – 11:25, 1:10 – 1:40; Note: this is when I will respond to emails as well

Course Description:
This course focuses on the alliance of factual knowledge, procedural proficiency, and conceptual understanding. The parallels of learner development and the progressive nature of mathematics content standards are explored. Teacher candidates will study the elements necessary to help P-8 students achieve high-quality mathematics instruction.

More specifically, in accordance with SC State and National Standards, teacher candidates will explore numbers and operations, geometry, measurement, data analysis and probability, and algebra. Problem solving, reasoning, multiple representations, connections, and communication are stressed throughout the course coverage of these content areas, facilitating the development of deep conceptual understanding, within each of the five aforementioned mathematical content areas.

At the successful completion of the course, teacher candidates will be better equipped to teach their future elementary- and middle-school students in a variety of ways such that their future students understand mathematics procedures and why mathematics concepts make sense. In addition, they will have a better understanding of how mathematical understanding develops for children as they progress from preschool through middle school.

Required Text:
- Hardcover (used hardcover: $75.00) and paperback available - purchase 4th Edition

- Available online at www.nctm.org (100-day free trial)

Recommended Text:
- Used copies available online for about $3.00 (good resource, but not drawn on much in class)

Additional Sources: I will draw from additional texts and curricula during the semester. They will be cited appropriately when utilized.

Course Requirements:
Demonstration of SOE Dispositions
Examples of how dispositions are evident are provided in italics.
- Belief that all students can learn, participation and attitudes expressed about students and learning
- Value and respect for individual differences, interactions in class discussions and participation in group work
- Value of positive human interactions, participation in class and in group work
Exhibition and encouragement of intellectual curiosity, enthusiasm about learning, and willingness to learn new ideas, participation in class and group discussions and performance on assessments

Dedication to inquiry, reflection, and self-assessment, participation in class and group discussions; performance on assessments (especially the reading and course reflections assignments)

Value of collaborative and cooperative work, thoughtful, constructive critiques of others’ work, participation in class activities

Sensitivity toward community and cultural contexts, participation in class and group discussions, tolerating, discussing, and respectfully listening to differing points of views

Engagement in responsible and ethical practice, performance on assessments, class attendance, and participation in group activities

Development of professional mastery over time, performance over time in writing, thinking, and expression of knowledge

Utilization of Computer Applications (Available in the CofC managed computer labs located in JC Long, Library, and other campus sites. If unfamiliar with these applications, set up a time for tutoring with me.)

- Internet
- Word processing
- OAKs

Completion of all assigned readings and assignments ON TIME.
See Course Assignments below for detailed descriptions.

Responsibility for ALL course content
Including lecture, text, outside reading, handouts, research, etc.

Responsibility for keeping up with grades and attendance
If you miss a class, ask a classmate for the missed assignments and notes.

Course Assignments:
Due dates for course assignments, as well as scheduled exams, are listed in the syllabus. Any changes will be announced in class. All assignments must be turned in during the class or to OAKS on the date due. Please make sure to pay attention to how each assignment should be submitted. If, for medical or serious personal reasons, an assignment is late, the instructor should be informed of the reasons. DO NOT give assignments to School of Education personnel.

All assignments must be typed and follow APA style guidelines.

Outline/Reading Reflections
To maximize the development of how to teach mathematics, it is imperative that TCs engage in their readings. Some of the readings will be addressed in class, but due to the vast body of pertinent literature in this field, some of the topics covered in the out-of-class readings will not. Therefore, to ensure active engagement with the readings and maximum knowledge gained from this course, TCs will be responsible for outlining and reflecting on readings throughout the semester.

There are five outline/reading reflections due throughout the course of the semester. Entries must be submitted to the dropbox in OAKS by 8 AM on the date indicated on the daily schedule. Failure to submit on time will result in a loss of credit. Understanding that we all have very busy lives – some weeks more busy than others, TCs are allowed to omit one of the five entries without penalty.

Each entry should be labeled: “ENTRY #: CHAPTER or CHAPTER SECTIONS”
Each entry should have the following:
1. An outline of each chapter. This does not mean simply writing the headings. These outlines should include the main ideas and examples (if applicable and useful).
2. One quotation from each section (example, if the reading is 7.1, 7.2, and 7.3, provide a quotation for each of these three sections).

3. Reflections on how each of the quotations affects thinking about teaching, learning, and future practices. Reflections should include descriptions of “AHA!” moments, topics for which TCs are confused, how topics connect to the PK-5 classroom (refer to “Connections to the PreK-8 Classroom,” “Analyzing a Textbook Page,” and “Analyzing Student Work” segments), and topics that are of particular interest or concern to TCs.

4. One question per CHAPTER that ties in multiple main ideas from the chapter. The question should get at the heart of the main themes being conveyed in the reading. (Prior to each reading, some things to ponder while doing the readings will be highlighted in class. This may help in the development of a question.)

5. A thorough answer to the question. TCs should be prepared to ask the question to the class and facilitate class discussion.

Like with all written assignments, TCs should follow APA formatting.

*Note to TCs: I have used feedback from former students in my revisions of this assignment. I was encouraged to let you all know ahead of time that these outlines take a long time (2 to 3 hours per chapter) if done properly. My former students found them very valuable but found that they could not wait until the last minute to complete them. Second semester you will have almost one each week. So please get comfortable writing these.

**Classwork and Homework Assignments**
In addition to outlines/reading reflections, to maximize the development of mathematical thinking, it is important that the TCs engage in the actual mathematics being described both in their readings and in class. As such, throughout the semester, there will be content-based mathematics problems given from the class text, online resources, and materials provided during class. I will collect classwork/homework four times throughout the semester (due dates indicated on the schedule). Each collection should include all of the classwork and homework assignments assigned up to the due date. (I will be explicit about the problems to be collected.) Depending on the number of problems per collection, I may spot check.

**Article Critique**
TCs will be asked to write a critique of an article from Teaching Children Mathematics. The argument of the critique should focus on important contemporary issues in mathematics education relevant to schools in South Carolina. Teaching Children Mathematics (TCM) is an official journal of the National Council of Teachers of Mathematics (NCTM) and a forum for the exchange of ideas in curriculum, instruction, learning, and teacher education. The primary audience of TCM is elementary-school teachers, and the journal contains many articles with ideas that are directly applicable to the classroom. TCs with an interest in upper-elementary- and middle-grades education also should look at Mathematics Teaching in the Middle School (MTMS) and are welcome to complete a critique from an article in this journal. TCs may join NCTM online at http://www.nctm.org/membership/content.aspx?id=7618. Both journals are available for review online for NCTM members. If you do not wish to become a member (which I encourage you to eventually do), the journals are available IN the library.

The objective in having TCs look at the journals is to help them gain familiarity with them as resources for teaching elementary- and middle-school mathematics. They are to critique an article from either TCM or MTMS. The critique should be from a "main" article -- one that is at least three pages and focuses on an issue. (Editorials, reviews, and other short essays are informative, but I want TCs to look at more extensive articles.) TCs may select any main article from the last three years. The May issue each year contains a subject index, so I encourage TCs to look at this in order to select an article on a topic that is of particular interest. The critique should be between two and three pages, word processed, and double spaced; it should focus on a (or the) major issue raised in the article. TCs should clearly state the article under review, including the volume and issue number of the journal. **TCs should choose an article that is NOT connected to their standard for the Standards Project.** Finally, TCs should attach a copy of the article. (The due date is indicated on the schedule.)
Tests: Midterm & Final
TCs will be expected to complete two tests: a midterm and final. Material on these summative assessments comes from (1) in-class lectures, discussions, and activities and (2) out-of-class readings and assignments. (Test dates are indicated on the schedule.)

Standards Project
In groups of 6, TCs will sign up to examine one of the five NCTM Content Standards (number & operations, measurement, geometry, data analysis & probability, and algebraic thinking) throughout the first three NCTM grade bands (Early Childhood Grade Band, covering PK-2; Elementary Grade Band, covering grades 3-5; Middle Grade Band, covering grades 6-8). TCs will also examine the SC and Common Core Standards that align with their NCTM Content Standard. In order to fully examine their content standard, I expect each group to:

- Familiarize themselves with the NCTM, SC, and Common Core Standards, understanding the expectations, objectives, indicators, etc. for each grade or grade band. (The language and breakdown is different for each set of standards.)
- Through this familiarization, articulate how children develop their mathematical thinking with regard to the specified content standard.
- Describe clearly how the standard translates into classroom practice. This is to be achieved in three ways:
  
  2. (2) reviewing and obtaining appropriate activities from either the journal *Teaching children mathematics (TCM)* or the journal *Mathematics Teaching in the Middle School (MTMS)* ([must go to library for this](http://www.corestandards.org/the-standards/mathematics) – not all issues available online – 2004 to present), and
  3. (3) interviewing/observing and obtaining appropriate activities from practicing teachers.

- Because “the mathematical Content and Process Standards…are inextricably linked,” describe how the Process Standards are integrated into implementations of the content standard (NCTM, 2000, p. 7).
- **Two group members** will be responsible for covering a grade band in his/her group’s content standard (You can either divvy these up so that one group member completes two activities, or you can do all four as partners. Whatever you choose, in the final write up, you must indicate who was responsible for each activity so that I can accurately assess each individual.)

  Early Childhood TCs (PK – 2) must obtain the following four activities:
  (1) PK-K activity from a teacher;
  (2) PK-K activity from *TCM*;
  (3) Grades 1-2 activity from a teacher; and
  (4) Grades 1-2 activity from *TCM*

  Elementary TCs (2 – 5) must obtain the following four activities:
  (1) Grades 2-3 activity from a teacher;
  (2) Grades 2-3 activity from *TCM*;
  (3) Grades 4-5 activity from a teacher;
  (4) Grades 4-5 activity from *TCM*

  Middle Grades TCs (6 – 8) must obtain the following four activities:
  (1) Grades 6-7 activity from a teacher;
  (2) Grades 6-7 activity from *MTMS*;
  (3) Grades 7-8 activity from a teacher; and
  (4) Grades 7-8 activity from *MTMS*
The intent of this project is to familiarize TCs with the Standards, to help them understand how to implement standards into classroom practice (better understanding what makes a good standards-based, well-aligned assignment), and to help them understand how children develop their mathematical thinking from PK through grade eight. Pragmatically, I want TCs to begin collecting detailed activities that span the Content Standards and grade bands so when they leave my class they do not have to start from scratch.

At the completion of our class coverage of a given content standard (number & operations, measurement, geometry, data analysis & probability, and algebraic thinking), the group which was assigned to that content area will:

- Teach a lesson on the development of student thinking from PK-8 in that given area. (In teaching this, they may consider having the class attempt to order particular expectations/indicators, ask questions about what classmates think fall within the content standard, provide a timeline of what is covered in each grade, etc.). TCs are expected to reveal how the NCTM, SC, and Common Core Standards differ in their descriptions of the development of mathematical thinking.
- During the lesson, the group will demonstrate three activities – (1) PK-1, (2) 2-5, and (4) 6-8 – exemplifying to their classmates the development of mathematical thinking within the given content area. Each of the group members should contribute equally in the facilitation of the lessons. This will require some out-of-class preparation.

Each group member will have the opportunity to assess the contributions of the other group members. Both the demonstration and peer assessment will be figured into each TC’s Standards Project grade.

Note that while not indicated on the schedule, TCs should (1) work on this project throughout the semester and (2) read chapters three through six in the Principles and standards for school mathematics.

Participation and Attendance

Participation

During class, there will be a number of activities. TCs will be expected to participate in these activities (periodically collected at the completion of class) and in general class discussions. In order to earn credit for classwork activities and discussions, TCs must be present.

TEDU Attendance Policy

Excessive absences (i.e., more than 15% - approximately 5 hours/4 classes) may result in receiving a “WA/F.” Students will be tardy if they arrive 10 minutes after class has started. Three tardies result in one absence. Students will be absent if they arrive after 20 minutes or if they leave class early. Regarding being tardy or having to leave class early, exceptions will be made on an individual basis, but students must speak with me about extenuating circumstances for such exceptions. Regarding absences, if a student exceeds allowable absences due to extenuating circumstances beyond the student’s control, a panel of professors from that semester will review the circumstances and make a final decision.

SNAP students, if they wish special accommodations, must see the professor within the first two weeks of the course or as soon as they find out about potential accommodations if determined mid semester. Athletes who will miss class due to athletic events must see the professor within the first two weeks of the course and submit athletic schedule for the semester, identifying classes that will be missed. No other absences will be allowed for athletes who miss the maximum allowable absences due to athletic events.

Written and Oral Communication

TCs are expected to use correct grammar at all times. Points will be deducted on written assignments for grammatical errors. All references must follow the American Psychological Association (APA) Guidelines for Term Papers. For assistance with APA, guidelines and examples can easily be found on the web. The Writing Lab is located on the first floor of Addlestone Library (Monday through Thursday 9:00 am to 9:00 pm and Friday 9:00 am to noon). Further, it is imperative that TCs use correct grammar in all oral communication, especially during field experiences. Classroom teachers, student peers, and I will collaborate to eliminate all oral grammatical errors, using an approach of constructive criticism.
Evaluation
It will be possible to earn 200 points during the semester. They will be distributed as follows:

- Outlines/Reading Reflections (4) 8 points each, 32 points total (16%)
- Classwork/Homework Assignments (4) 8 points each, 32 points total (16%)
- Article Critique 20 points (10%)
- Midterm 30 points (15%)
- Standards Project 40 points (20%)
  - Presentation 9 points
  - Shared Lessons/Activities 5 points
  - Write Up 26 points
- Final Exam 30 points (15%)
- Participation and Attendance 16 points (8%)

Evaluation Scale

<table>
<thead>
<tr>
<th>Letter Grades</th>
<th>Percentage Range</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100%</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>91-92%</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>89-90%</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>86-88%</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>84-85%</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>82-83%</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>79-81%</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>77-78%</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>75-76%</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>72-74%</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>70-71%</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>≤ 69%</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Respectful Conduct
TCs are expected to be respectful and considerate of one another. Cell phones should be turned off while in class. Laptops should only be used in class if they are facilitating the development of mathematical thinking; if they appear to be a distraction, I will ask that they be put away.

CofC Honor System
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying
from others’ exams, fabricating data, and giving unauthorized assistance. Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

ADA Accommodations
In compliance with the Americans Disabilities Act (ADA), all qualified students are entitled to “reasonable accommodations.” Any students requiring accommodations should contact the Center for Disability Services (953-1431) and provide me with documentation of needed accommodations within the first two weeks of the course or as soon as they find out about potential accommodations if determined mid semester.

Course Objectives
All teacher preparation programs in the College of Charleston’s School of Education (SOE) are guided by a commitment to the conceptual framework of “Making the Teaching and Learning Connection.” Three elements of teacher competency are fundamental to this framework: teachers must (1) understand and value the learner, (2) know what and how to teach and assess within a conducive learning environment, and (3) understand themselves as professionals. In addition, these competencies are foundational to the learning and assessments within this course, facilitating the development of knowledge, skills, and dispositions necessary for becoming an effective teacher.

Below are the specific end-of-course outcomes related to these teacher competencies. They are derived from the standards set forth by the National Council of Measurement in Education (NCME) and relate to those of the (1) School of Education (SOE), (2) National Council for Accreditation of Teacher Education (NCATE), (3) National Association for the Education of Young Children (NAEYC), (4) National Middle School Association (NMSA), and State Standards for Teacher Education (SC). They, therefore, indicate the expectations for teacher candidates within the School of Education, early childhood teachers, elementary grades teachers, and middle grades teachers.

1. Teacher candidates (TCs) will develop the understanding of how students learn to construct mathematical ideas from the concrete early childhood experiences through the development of abstract thinking abilities in young adolescence.
   SOE I; NCATE 1; NAEYC 4b; NMSA 1.K1, 1.P2, 1.P4, 5.K4

2. TCs will articulate a vision of school mathematics that supports access of all students to a curriculum that emphasizes important mathematical concepts; effective and engaging research-based instructional practices; and high expectations with appropriate accompanying accommodations.
   SOE II, III; NCATE 2d, 3d; NAEYC 4b; NMSA 1.D3, 5.D7

3. TCs will convey an appreciation for the discipline of mathematics including its history and the contributions of diverse cultures to the field.
   SOE II, VII; NCATE 2d; SC 4

4. TCs will articulate the knowledge that mathematics curriculum must be coherent and focused on important useful concepts that are connected within the discipline and across disciplines.
   SOE II; NCATE 2d, 2i, 3a; NAEYC 4b; NMSA 4.K2

5. TCs will recognize the importance of the role of student ideas, interests, and needs in the design, implementation, and evaluation of mathematically-based learning experiences.
   SOE I; NCATE 2d, 3a, 3d; NAEYC 4b; NMSA 3.K5, 3.D4, 4.P3; SC 4

6. TCs will demonstrate an understanding of the need for a variety of instructional strategies to effectively address developmental, ability and learning style needs of PK-8 students exhibiting diversity in its many forms.
7. TCs will develop the knowledge of, and dispositions that value, ongoing, systematic, formal, and informal assessment as an integral part of instruction that guides and enhances learning.
SOE VI; NCATE 4; NAEYC 3, 4b; NMSA 1.P6, 5.K8, 5.D5, 5.P4, 6(all)

8. TCs will communicate about and through mathematics verbally and in writing using both everyday language and mathematical representations.
SOE II; NCATE 2d, 3e; NAEYC 4b; NMSA 4.K4, 4.D4, 4.P5

9. TCs will demonstrate knowledge of the organization of the content standard areas of number and operations, algebra, geometry, measurement, data analysis and probability within the PK-8 mathematics curriculum as prescribed by the NCTM and the SC Standards.
SOE II; NCATE 2d; NAEYC 4b; NMSA 4, 6.K5; SC 7

10. TCs will demonstrate the value and integrative nature of the process standards of problem solving, reasoning, communication, connections, and representations within the PK-8 mathematics curriculum as prescribed by the NCTM and the SC Standards.
SOE II; NCATE 2d, 3c; NAEYC 4b, 4c; NMSA 4, 5.K3, 5.P2, 6.K5; SC 7

11. TCs will demonstrate competency in, and an understanding of the value of, a breadth and depth of mathematical knowledge and skills that extend beyond the level for which the TC is preparing.
SOE II; NCATE 2d; NMSA 4.K1, 4.P2
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings (Math at Hand, NCTM, &amp; O’Daffer) &amp; Assignments to be completed for the given class</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/24</td>
<td>❖ Introductions: Beliefs about mathematics &amp; Course overview</td>
<td>❖ Review Common Core, SC, and National Standards online</td>
</tr>
<tr>
<td></td>
<td>❖ “Basics” in mathematics that all children must know</td>
<td>❖ Read Chs. 1-3 of NCTM</td>
</tr>
<tr>
<td></td>
<td>❖ Understanding how students learn mathematics</td>
<td>❖ Bring an overview of each to class related ONLY to the content standard you will be covering for your final project and the assigned process standard and principle</td>
</tr>
<tr>
<td></td>
<td>❖ Go over how to retrieve each set of standards: sign up for standards project</td>
<td></td>
</tr>
<tr>
<td>8/29</td>
<td>❖ Common Core, SC, and NCTM Standards</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td>8/31</td>
<td>❖ Problem solving</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td></td>
<td>❖ Reasoning</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td></td>
<td>❖ Communicating</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td></td>
<td>❖ Questions to ponder while reading Chs. 2 &amp; 3</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td></td>
<td>❖ Assign HW #1 problems</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td>9/5</td>
<td>❖ Sets and whole numbers</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td>9/7</td>
<td>❖ Addition and subtraction of whole numbers</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td>9/12</td>
<td>❖ Multiplication and division of whole numbers</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td>9/14</td>
<td>❖ Numeration systems</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td>9/19</td>
<td>❖ Numeration cont.</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td></td>
<td>❖ Independently: Mental math, Estimation and rounding</td>
<td>❖ O’Daffer: Ch. 1</td>
</tr>
<tr>
<td></td>
<td>❖ (included in outline/reflection #1)</td>
<td>❖ Outline/Reflection #1 Due to OAKs by 8 am: Chs. 2 &amp; 3</td>
</tr>
<tr>
<td>9/21</td>
<td>❖ Factors and divisibility</td>
<td>❖ O’Daffer: Ch. 4</td>
</tr>
<tr>
<td></td>
<td>❖ Prime and composite numbers</td>
<td>❖ Complete handout while reading Ch. 4</td>
</tr>
<tr>
<td></td>
<td>❖ GCF and LCM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>❖ Questions to ponder while reading Chs. 5 &amp; 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>❖ Work on HW #1 problems</td>
<td></td>
</tr>
<tr>
<td>9/26</td>
<td>❖ Integers</td>
<td>❖ CW/HW #1 problems due at beginning of class</td>
</tr>
<tr>
<td></td>
<td>❖ Addition and subtraction with integers</td>
<td>❖ O’Daffer: 5.1</td>
</tr>
<tr>
<td></td>
<td>❖ Assign HW #2 problems</td>
<td></td>
</tr>
<tr>
<td>9/28</td>
<td>❖ Multiplication &amp; division with integers</td>
<td>❖ O’Daffer: 5.2</td>
</tr>
<tr>
<td>10/3</td>
<td>❖ Rational number system</td>
<td>❖ O’Daffer: 6.1</td>
</tr>
<tr>
<td></td>
<td>❖ Article Critique Due to OAKs by 8 am</td>
<td>❖ Article Critique Due to OAKs by 8 am</td>
</tr>
<tr>
<td>10/5</td>
<td>❖ Addition and subtraction with rational numbers</td>
<td>❖ O’Daffer: 6.2</td>
</tr>
<tr>
<td>10/10</td>
<td>❖ Multiplication and division with rational numbers cont.</td>
<td>❖ O’Daffer: 6.3, 6.4, &amp; 6.5</td>
</tr>
<tr>
<td>10/12</td>
<td>❖ Multiplication and division with rational numbers cont.</td>
<td>❖ Outline/Reflection #2 Due to OAKs by 8 am: Chs. 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td>❖ Work on HW #2 problems</td>
<td></td>
</tr>
<tr>
<td>10/17</td>
<td>Fall Break</td>
<td></td>
</tr>
<tr>
<td>10/19</td>
<td>❖ Decimals, proportional reasoning, ratio, and percent: Math innovations</td>
<td>❖ CW/HW #2 problems due at beginning of class (You can retrieve them from my</td>
</tr>
<tr>
<td>Date</td>
<td>Topics</td>
<td>Assignments</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10/24</td>
<td><strong>Midterm</strong></td>
<td>Review for midterm: O’Daffer Chs. 1-6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>O’Daffer: 7.1, 7.2, &amp; 7.3</td>
</tr>
<tr>
<td>10/26</td>
<td>Decimals, proportional reasoning, ratio, and percent: <em>Math innovations</em> cont.</td>
<td></td>
</tr>
<tr>
<td>10/31</td>
<td>The Development of “Number and Operations” Thinking</td>
<td>Outline/Reflection #3 Due to OAKs by 8 am: Ch. 7 (Only 7.1 – 7.3)</td>
</tr>
<tr>
<td></td>
<td>Questions to ponder while reading Chs. 8 &amp; 9</td>
<td>Number and Operations Presentation</td>
</tr>
<tr>
<td></td>
<td>Assign HW #3 problems</td>
<td></td>
</tr>
<tr>
<td>11/2</td>
<td>Data analysis</td>
<td>O’Daffer: Ch. 8</td>
</tr>
<tr>
<td>11/7</td>
<td>Probability</td>
<td>O’Daffer: 9.1, 9.2, and 9.4</td>
</tr>
<tr>
<td></td>
<td>Work on #3 problems</td>
<td>Outline/Reflection #4 Due to OAKs by 8 am: Chs. 8 and 9.1, 9.2, and 9.4</td>
</tr>
<tr>
<td>11/9</td>
<td>The Development of “Data Analysis and Probability” Thinking</td>
<td>Data Analysis and Probability Presentations</td>
</tr>
<tr>
<td></td>
<td>Questions to ponder while reading Chs. 10, 11, &amp; 12</td>
<td></td>
</tr>
<tr>
<td>11/14</td>
<td>Geometry</td>
<td>O’Daffer: 10.1, 11.1, and 11.2 (Skim other parts of chapter at your convenience)</td>
</tr>
<tr>
<td></td>
<td>Assign HW #4 problems</td>
<td>CW/HW #3 due at beginning of class</td>
</tr>
<tr>
<td>11/16</td>
<td>The Development of Geometric Thinking</td>
<td></td>
</tr>
<tr>
<td>11/21</td>
<td>Measurement</td>
<td>O’Daffer: Ch. 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outline/Reflection #5 Due to OAKs by 8 am: Assigned sections of Chs. 10, 11, and all of 12</td>
</tr>
<tr>
<td>11/23</td>
<td>Thanksgiving Break</td>
<td></td>
</tr>
<tr>
<td>11/28</td>
<td>The Development of “Measurement” Thinking</td>
<td>Measurement Presentations</td>
</tr>
<tr>
<td></td>
<td>Questions to ponder while reading Ch. 13</td>
<td>Work on standards project</td>
</tr>
<tr>
<td>12/5</td>
<td>The Development of Algebraic Thinking</td>
<td>Algebra Presentations</td>
</tr>
<tr>
<td></td>
<td>Class evaluations</td>
<td>CW/HW #4 due at beginning of class</td>
</tr>
<tr>
<td>12/9</td>
<td>NO CLASS</td>
<td></td>
</tr>
<tr>
<td>EXAM WEEK</td>
<td>Final Exam</td>
<td>Standards Projects Due to my mailbox by NOON</td>
</tr>
</tbody>
</table>