



**THE UNIVERSITY OF TEXAS AT EL PASO**  
**College of Education- Department of Teacher Education**

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| <b>Title of Course:</b><br>MSED 4310 (29206) Teaching Mathematics in the Intermediate & Middle Grades             | <b>Credits:</b> 3  |
| <b>Semester:</b> Spring 2020  | <b>Instructor Information:</b><br><b>Professor:</b> Dr. David J. Carrejo, Ph.D.<br><b>Office:</b> College of Education, EDUC 802<br><b>Phone:</b> 747-5856<br><b>E-mail:</b> <a href="mailto:dcarrejo@utep.edu">dcarrejo@utep.edu</a> (best means of contact)<br><b>Office Hours:</b> T 9:30 a.m. – 11:30 a.m.,<br>R 9:30 a.m. – 11:30 a.m., or by appointment |
| <b>Class meeting time:</b> F 9:00 a.m. – 12:00 p.m.<br><b>Class meeting place:</b> College of Education, Room 405 |  |

**Course Description:** Students enrolled in this course will explore the methods of teaching mathematics in intermediate and middle grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as real numbers and operations on real numbers, geometry, statistics and probability, and algebra (patterns, variables, and functions). We will reflect upon our own experiences and beliefs about mathematics. We will look at mathematics as a discipline, and compare more traditional ideas about what it means to ‘know’ and ‘do’ mathematics to the vision of mathematics advocated by the reform movements as well as what it means to ‘know’ and ‘do’ mathematics relying on constructivist principles of learning and teaching.

**Course Objectives:** Upon completion of the course, students will be better prepared to:

- Identify what makes a ‘good mathematical task’, and how a meaningful task supports student learning
- How children can make sense of several key mathematics concepts
- How tools (including manipulatives and technology) assist children in their thinking and problem solving
- Identify their role as teacher in a math classroom
- Plan and implement mathematics lessons based upon constructivist principles of learning and teaching
- Adjust lessons and instruction based on what they learn from their students

**This syllabus is subject to change as needed. Any changes to the syllabus will be announced in class.**

## STUDENT LEARNING OUTCOMES

| TEXAS TEACHING STANDARDS [SBEC]<br>ELED 4310 students will be able to:  | COURSE SPECIFIC STANDARDS<br>ELED 4310 students will be able to:  | Measurements<br>(means of assessment)                       |
|---|---|---|
| <p><b>Standard I. Number Concepts:</b> The mathematics teacher understands and uses numbers, number systems and their structure, operations and algorithms, quantitative reasoning, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.</p>                                       | <p>Know and understand the connections of operations, algorithms, and relations with their associated concrete and visual representations and how number concepts, operations, and algorithms are developmental and connected across grade levels.</p>                          | <p>Homework assignments<br/>Reflections<br/>Quizzes</p>     |
| <p><b>Standard II. Patterns and Algebra:</b> The mathematics teacher understands and uses patterns, relations, functions, algebraic reasoning, analysis, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.</p>  | <p>Know and understand how to use algebraic concepts and reasoning to investigate patterns, make generalizations, formulate mathematical models (graphic, numeric, and symbolic representations), make predictions, and validate results.</p>                                   | <p>Homework assignments<br/>Reflections<br/>Quizzes</p>     |
| <p><b>Standard III. Geometry and Measurement:</b> The mathematics teacher understands and uses geometry, spatial reasoning, measurement concepts and principles, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.</p>  | <p>Know and understand how to use spatial reasoning to investigate concepts such as direction, orientation, perspective, shape, and structure, and how to make connections among geometric ideas and number concepts, measurement, probability and statistics, and algebra.</p> | <p>Homework assignments<br/>Reflections<br/>Quizzes</p>     |
| <p><b>Standard IV. Probability and Statistics:</b> The mathematics teacher understands and uses probability and statistics, their applications, and technology appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in order to prepare students to use mathematics.</p>   | <p>Know and understand how to use graphical and numerical techniques to explore data, characterize patterns, and describe departures from patterns and how to design experiments and surveys to answer questions and solve problems.</p>  | <p>Homework assignments<br/>Reflections<br/>Quizzes</p>     |
| <p><b>Standard VII. Mathematical Learning and Instruction:</b><br/>The mathematics teacher understands how children learn and develop mathematical skills, procedures, and concepts, knows typical errors students make, and uses this knowledge to plan, organize, and implement instruction; to meet curriculum goals; and to teach all students to understand and use mathematics.</p> | <p>Apply theories and principles of learning mathematics to plan and implement developmentally appropriate and effective instructional activities for all students</p>  | <p>Lesson implementation and evaluation<br/>Reflections</p> |
| <p><b>Standard VIII. Mathematical Assessment:</b> The mathematics teacher understands assessment and uses a variety of formal and informal assessment techniques appropriate to the learner on an ongoing basis to monitor and guide instruction and to evaluate and report student progress.</p>   | <p>Select or design and administer a variety of appropriate assessment instruments and/or methods (e.g., formal/informal, formative/summative) to monitor student understanding of mathematics and progress over time</p>   | <p>Lesson implementation and evaluation<br/>Reflections</p> |

## Required Text & Readings:

- Van de Walle, J. A., Karp, K.S., Lovin, L.H., & Bay-Williams, J.M. (2018). *Teaching Student-Centered Mathematics: Developmentally Appropriate Instruction for Grades 6-8 (Volume II), 3<sup>rd</sup> Edition*. Boston, MA: Pearson.
- *Geogebra: Dynamic Software for Everyone [Classic 5.0]*. Available: [www.geogebra.org](http://www.geogebra.org). This is FREE, open-source software for both Mac and Windows platforms.
- Other necessary handouts and/or readings will be passed out in class. **ALL COURSE HANDOUTS WILL BE MADE AVAILABLE ON Blackboard (through my.utep.edu). You MUST have a valid UTEP login and password to access my.utep.edu, Blackboard, and many other relevant UTEP websites.** A UTEP e-mail address is required for all e-correspondence and more effective communication.

## Recommended Resources for Middle School Mathematics:

- [Annenberg Media](#)
- Assessment in Mathematics:
  - [Measuring What Counts: A Conceptual Guide for Mathematics Assessment](#)
  - [Mathematics Assessment Project - Assessing 21st Century Math](#)
- [Early Algebra](#)
- [National Library of Virtual Manipulatives](#)
- [NCTM Illuminations](#)
- [NCTM Principles and Standards for School Mathematics](#)
- [Science NetLinks](#)
- [State of Texas Assessments of Academic Readiness \(STAAR™\) Resources](#)
- [Texas Educator Standards](#)
- [TEKS for Mathematics](#)

**Inclusiveness and equity:** Learning happens only when we feel respected as a whole human being. My top priority in our classroom is to cultivate relationships of trust and respect and a sense that we see each other as whole, complex human beings. That you experience this in our classroom is important for the sake of your learning in our course *and* for the sake of your future students' learning, so that you feel able to cultivate such relationships with them. To that end, I want you to know that all of you is welcome in our classroom space—all the parts of you as a person are welcome in our discussions, our activities, our assignments, and in our assessments. We are all complex people with a variety of perspectives, experiences, challenges, assets, and resources—our gender identities, our sexual orientations, our religions, our races, our ethnicities, our economic statuses, our immigration statuses, our parenthoods, our veteran statuses, our ages, our languages, our abilities and disabilities. All the parts of you are welcome in our learning community to the extent that you feel comfortable bringing them in. I strive to show respect for the variety and wholeness in each of you, and I expect that each of you shows respect for each other as well. If you feel marginalized in our class, and you feel comfortable discussing it, I would like to know so that I can support you, protect you, and make changes that feel more inclusive and equitable. You can also talk with our Department Chair and/or you can report a complaint of discrimination to the University's Equal Opportunity Office, Kelly Hall, Third Floor, 915-747-5662 or [eoaa@utep.edu](mailto:eoaa@utep.edu).

**Standards of academic integrity:** Students are expected to uphold the highest standards of academic integrity. Any form of scholastic dishonesty is an affront to the pursuit of knowledge and jeopardizes the quality of the degree awarded to all graduates of UTEP. Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are not attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Proven violations of the detailed regulations, as printed in the Handbook of Operating Procedures (HOP) and available in the Office of the Dean of Students, may result in sanctions ranging from disciplinary probation, to failing grades on the work in question, to failing grades in the course, to suspension or dismissal among others.

**Students with Disabilities statement:** If you have or believe you have a disability, you may wish to self-identify. You can do so by providing documentation to the Center for Accommodations and Support Services (CASS) located in Union E Room 106. Students who have been designated as having a disability must reactivate their standing with CASS on a yearly basis. Failure to report to this office will place a student on the inactive list and nullify benefits received. If you have a condition which may affect your ability to exit safely from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss this in confidence with the instructor and/or the director of CASS. You may call 915-747-5148 for general information about the Americans with Disabilities Act (ADA).

## Evaluation & Coursework Requirements of Students:

| Coursework Requirements                             |  | Percentage | How Grades are Determined |                       |
|---|--|------------|---------------------------|-----------------------|
| Class Attendance and Participation                  |  | 10%        | <b>Grade</b>              | <b>Percentage (%)</b> |
| Activity Evaluation                                 |  | 15%        | A                         | 90 -100               |
| Homework assignments – 5 x 20 pts                   |  | 35%        | B                         | 80- 89.9              |
| Final Lesson Planning and Implementation reflection |  | 40%        | C                         | 70- 79.9              |
|   |  |            | D                         | 60- 69.9              |
|   |  |            | F                         | Below 60              |

## Course Assignments

### 1. Lesson/Microteaching Project (2 parts)

You will be required to create a lesson plan for a given topic that meets the following criteria: 1) it is appropriate for grades 6 – 8, 2) it utilizes the 5E pedagogy, and 3) it is aligned with STAAR objectives as well as TEKS standards. You will present your lesson in a microteaching activity during our regularly scheduled class period. Topics will be approved and finalized by me. You will receive constructive feedback in the form of written analysis from me. At the end of the semester you will receive copies of ALL lesson plans and ALL feedback for your own use and reference (in a type of portfolio).

Part 1 Working in groups of two, you will prepare a written lesson plan to be submitted for a grade. This will be submitted before you actually teach the lesson. The format for the lesson plan will be discussed in class and **a guide is provided on page 6 of this syllabus.**

Part 2 Each team will be assigned at random to introduce/implement their lesson plan on a date specified in class. You will distribute copies of your lesson to each member of the class, and you will submit an electronic copy of your final lesson (including any PowerPoint slides and handouts) to me via e-mail. Lessons should be **30 - 40 minutes in length**. If you have any need for manipulatives or other teaching material, please inform me before you teach your lesson (at least TWO DAYS IN ADVANCE).

### 2. Homework assignments

There will be short homework assignments, primarily skills-based, throughout the semester. They will be due the following week **without exception**. Assignments will be announced and passed out in class and due dates will be determined. The homework assignments will reflect not only the appropriate mathematics content for grades 4-8 but also the content you should expect to see on your certification test.

### 3. Activity Evaluation

You will locate a lesson/activity via a list of resources that I will provide to you (e.g. Illuminations website, Connected Mathematics Project, etc.). I will provide you with ideas throughout the semester. Drawing from your experience in your mentor school, the Van de Walle textbook, and your own lived experiences, present a thoughtful analysis on the strengths and shortcomings of how this activity responds to (in theory and in practice) what you consider the main issues:

- What is the content being addressed or taught?
- Based on what you believe to be the developer's intention, what would you change and why?
- What implications would your change (or changes) have on future learning and/or practice?

Each person will be responsible for writing a minimum three (3)-page evaluation paper on their chosen activity/lesson. **A rubric is provided on page 9 of this syllabus. This assignment will be turned in during exam week.**

## ACTIVE LEARNING LESSON PLAN GUIDE

The lesson plan should be typed and roughly 2-3 pages long. Design a lesson that will build on and extend students' understanding of a chosen math topic in some meaningful way. Your students need to be actively thinking during your lesson. You should strive to keep students mentally active. Teach *through* problem solving/inquiry. Refer to your Van De Walle textbook or any other resource(s) as needed. Your lesson plan should be something that is useful to you as you teach the lesson. It should include information that helps others understand your thinking behind your planning. The plan should include at least the following:

- **Title/Topic**
- **Grade level**
- **Goals and objectives** of your lesson: Be as specific as possible. Include the specific ideas and processes you hope to help your students develop and/or understand.
- **TEKS Standards:** Provide specific, standard expectations for teaching the selected concept/procedures for selected grade level.
- **Instructional Sequence:** Outline the learning plan (teaching & learning activities). This plan should be aligned clearly with the desired results (i.e., geared towards having students meet the objectives, answer the essential questions, and be able to complete the assessment activities). The plan should include the following components:
  - List of instructional materials & resources: Include a variety of resources that you used in preparing the lesson (e.g., similar lesson plans that you found on the Internet, information from cooperating teacher, textbook, etc.).
  - Timeline: Next to each step, indicate approximate length of time you expect each step to take.
  - **Introductory activities:** Hook/capture (engage) student interest; setting up the task; relate to previous learning (review) and how this aligns with what is to follow; tell students what they will learn and be expected to do as a result of the lesson.
  - Developmental activities: Outline the content and outline the instructional strategies & learning activities. Include details what you will do, how you will organize/prepare students for tasks, and what students will do. For example, if you plan to involve students in discussion, list key/stem questions that you might ask to generate discussion.
  - Closing activities: List activities that you & students will do to summarize the lesson, reinforce what was covered, and tie everything together so students see how the lesson fits into the context of what they have already done and what is coming next.
  - Assessment techniques: Describe what you will do during the lesson to assess student understanding. Describe what you will do with the materials produced (e.g., will you mark questions as you walk around, will you collect journals and write comments, will you evaluate group presentations with a rubric?) Attach copies of any written assessments (tests, rubrics, observational checklists, format for anecdotal records).

**Along with the lesson plan, you should also attach all handouts you would provide students.**

## RUBRIC FOR ACTIVE LEARNING LESSON PLAN

| Category                          | Exceeds Standard (5 pts)   | Meets Standard (3 – 4 pts)  | Does Not Meet Standard (0 – 2 pts)   |
|-----------------------------------|--|---|--|
| <b>Structure</b>                  | Lesson Plan format is concise addressing universal design and makes connections to student needs. Included are the elements of Active Learning, Inquiry-based, TPACK, with differentiation that addresses prior knowledge, real world connections, identified (data-driven) student strengths and knowledge gaps.  | Lesson Plan format is somewhat concise addressing some of the following areas: universal design and makes connections to student needs. Included are some of the elements of Active Learning, Inquiry-based, TPACK, with differentiation that addresses prior knowledge, real world connections, identified (data driven) student strengths and knowledge gaps.   | Lesson Plan format is disorganized and does not include components addressing universal design and making connections to student needs. The elements of Active Learning, Inquiry-based, TPACK, with differentiation that addresses prior knowledge, real world connections, identified (data driven) student strengths and knowledge gaps are not included.  |
| <b>Content</b>                    | Texas Essential Knowledge and Skills and Learning objective are stated and addressed in the lesson structure. Active, constructive learning is promoted through discovery, critical-creative thinking and challenging expectations. Error Analysis and self-reflection are promoted resulting in student learning goal setting.  | Texas Essential Knowledge and Skills and Learning objective are somewhat stated and addressed in the lesson structure. Active, constructive learning is primarily promoted through discovery, critical-creative thinking and challenging expectations. Error Analysis and self-reflection are somewhat promoted resulting in student learning goal setting.   | Texas Essential Knowledge and Skills and Learning objective are not stated and addressed in the lesson structure. Active, constructive learning is not promoted through discovery, critical-creative thinking and challenging expectations. Error Analysis and self-reflection are not promoted and does not result in student learning goal setting.  |
| <b>Lesson Delivery Strategies</b> | Strategies for lesson delivery include interactive, hands-on approaches and differentiated instruction to address individual student needs and learning styles. Formative evaluation is integrated to ensure content mastery (evidence based). Lesson delivery is literacy-based and provides opportunities for engagement through cross-curricular connections, and integration of varied tools and technology. | Strategies for lesson delivery somewhat includes interactive, hands-on approaches and differentiated instruction to address individual student needs and learning styles. Formative evaluation is somewhat integrated to ensure content mastery (evidence based). Lesson delivery is somewhat literacy-based and provides some opportunities for engagement through cross-curricular connections and has some integration of varied tools and technology. | Strategies for lesson delivery does not include interactive, hands-on approaches and differentiated instruction to address individual student needs and learning styles. Formative evaluation is not integrated to ensure content mastery (evidence based). Lesson delivery is not literacy-based and does not provide opportunities for engagement through cross-curricular connections and does not have integration of varied tools and technology. |

## RUBRIC FOR ACTIVE LEARNING LESSON IMPLEMENTATION

| Category  | Exceeds Standard (5 pts)   | Meets Standard (3 – 4 pts)   | Does Not Meet Standard (0 – 2 pts)  |
|---|--|--|---|
| <p style="text-align: center;"><b><i>Content Knowledge<br/>Expertise and<br/>Achieving<br/>Expectations</i></b></p> | <p>Solid teacher knowledge of Texas Essential Knowledge and Skills and learning objectives is present. Teacher and student understanding of the topic are visibly demonstrated. Active, constructive learning is promoted through discovery, critical-creative thinking and challenging expectations. Through cross-curricular and real-world connections, the teacher has addressed academic, social and emotional expectations.</p>                                | <p>Developing teacher knowledge of Texas Essential Knowledge and Skills and learning objectives is present. Teacher and student understanding of the topic are somewhat visibly demonstrated. Active, constructive learning is somewhat promoted through discovery, critical-creative thinking and challenging expectations. Through cross-curricular and real-world connections, the teacher has somewhat addressed academic, social and emotional expectations.</p>  | <p>Weak teacher knowledge of Texas Essential Knowledge and Skills and learning objectives is present. Teacher and student understanding of the topic are visibly weak. Active, constructive learning is not promoted through discovery, critical-creative thinking and challenging expectations. The teacher has not addressed academic, social and emotional expectations through cross-curricular and real world connections,</p>   |
| <p style="text-align: center;"><b><i>Critical Thinking and<br/>Argumentation</i></b></p>                            | <p>Effective Questioning focused on encouraging student active learning through discovery and critical-creative thinking based on Bloom’s Revised Taxonomy. Visual and auditory evidence that students are challenged is present. Error analysis and self-reflection are promoted resulting in visible student learning goal setting, as well as addressing gaps in content mastery.</p>   | <p>Effective Questioning generally focused on encouraging student active learning through discovery and critical-creative thinking based on Bloom’s Revised Taxonomy. Visual and auditory evidence that students are somewhat challenged is generally present. Error analysis and self-reflection are somewhat promoted resulting in visible student learning goal setting, as well as somewhat addressing gaps in content mastery.</p>  | <p>Effective Questioning did not focus on encouraging student active learning through discovery and critical-creative thinking based on Bloom’s Revised Taxonomy. Visual and auditory evidence that students are challenged is not present. Error analysis and self-reflection are not promoted resulting in visible learning goal setting, as well as gaps in content mastery were not addressed.</p>  |
| <p style="text-align: center;"><b><i>Lesson Delivery</i></b></p>  | <p>The lesson is well organized, literacy-based, and the purpose of the lesson is clear from the beginning, and the lesson objectives are clear and understandable. Individual student needs and learning styles are addressed through universal design integrating Active Learning, Inquiry-based structure, TPACK, with differentiation that addresses prior knowledge, real world connections, identified (data-driven) student strengths and knowledge gaps.</p> | <p>The lesson is basically organized, literacy-based, and the purpose of the lesson becomes clear within the lesson, and the lesson objectives are clear and understandable, but some important points are not addressed. Individual student needs and learning styles are somewhat addressed through universal design integrating Active Learning, Inquiry-based structure, TPACK, with differentiation that somewhat addresses prior knowledge, real world connections, identified (data-driven) student strengths and knowledge gaps.</p> | <p>The lesson is not organized, literacy-based, and the purpose of the lesson is unclear from the beginning, and the lesson objectives are not clear and understandable throughout the lesson. Individual student needs and learning styles are not addressed through universal design integrating Active Learning, Inquiry-based structure, TPACK, with differentiation that did not address prior knowledge, real world connections, identified (data-driven) student strengths and knowledge gaps.</p> |



## RUBRIC FOR ACTIVITY/LESSON EVALUATION

If you meet each goal completely, you will receive full points for that goal. Incomplete or skipped goals will receive partial or no points.

| <b>Goal:</b>   | <b>Points:</b>   |
|--|------------------|
| Activity (and content) clearly identified and explained (Identifies the core content).   | <i>10 points</i> |
| Described what you would change or not change about the activity.  | <i>10 points</i> |
| Reflected on the implication(s) of altering/changing (or not altering/changing) the activity for future learning or practice (Informed on learning and instruction). | <i>10 points</i> |
| <b>Total:                    /30 points</b>  |                  |

**A: 28 – 30 points**

Presentations and analysis of activity well presented with depth and detailed explanation. Impact on individual teaching and reflection about personal practices well presented and examples of changes or reasons for no change supported well.

**B: 25 – 27 points**

Reflection about activity and how they could/will impact teaching and learning is weak (superficial/lacked depth) but could improve with work. Impact on current teaching lacked some depth and showed little analysis (but beyond the bare minimum). Implications for future practice limited or also weak.

**C: 22 – 24 points**

Overall, the evaluation and reflection very weak. Little discussion of what you would change or not change. Identified what was chosen for assignment (or simply described the activity) but little or no discussion with any depth about impact on current or future practice. Work showed bare minimum of analysis.

**D: 19 – 21 points**

Overall, presentation and analysis non-existent. No discussion of what you would change or not change. Identified what was chosen for assignment and did not even describe the activity in-depth. Little or no discussion with any depth about impact on current or future practice.

**Fail: 18 points or fewer**

Failed to meet structure requirements (or turn in assignment). Very shallow presentation.

## Course Requirements

- **Attendance and Participation:** It is expected that students will attend all classes and actively participate in working on projects and class discussions. Students are expected to prepare for each class session. Lateness to class is strongly discouraged. With the emphasis on collegiality it is important that all group members be in class to contribute to the group's effort in developing an understanding of what it means to teach mathematics effectively. There will be a student sign-in sheet at the beginning of each class. If a student misses a session, it is the responsibility of the student for knowing and completing all work required. Each attendance will count towards the final grade. Two tardies (including early leaves) will count as one absence. More than two absences may result in a student earning one-letter grade lower in the course.
- **Due dates:** Assignments are due on the specified dates. Late assignments will not be accepted. Type or word-process written assignments. All assignments should be double spaced with a 12-point font. Number your pages.
- **Calendar changes:** The schedule of topics and reading assignments may change over the course of the semester. Any changes to the syllabus will be announced in class. Every student is responsible for these changes whether or not the student is present in class.

**Class Schedule: Please note that the schedule below is subject to change**

| Date        | Topic/Issue*  | Activity Focus   | Assignment                      |
|-------------|---|--|---------------------------------|
| January 24  | <ul style="list-style-type: none"> <li>Introduction to the course</li> <li>Teaching Mathematics Through Inquiry</li> </ul>  | <ol style="list-style-type: none"> <li>“Doing” mathematics</li> <li>Constructivism</li> </ol>  |                                 |
| January 31  | <ul style="list-style-type: none"> <li>Chapter 8 – Fraction Concepts and Computation</li> <li>Chapter 9 – Decimal Concepts and Computation</li> <li>Chapter 10 – The Number System</li> </ul> | <ol style="list-style-type: none"> <li>Fraction sense</li> <li>Equivalence</li> <li>Algorithms</li> <li>Integers</li> <li>Exponents</li> </ol>         |                                 |
| February 7  | <ul style="list-style-type: none"> <li>Chapter 14 – Exploring Measurement Concepts</li> <li>Chapter 13 – Developing Geometry Concepts</li> </ul>  | <ol style="list-style-type: none"> <li>Length and perimeter</li> <li>Volume</li> <li>Geoboards and mathematical space</li> </ol>                       | <b>Homework 1 Due</b>           |
| February 14 | <ul style="list-style-type: none"> <li>Chapter 13 – Developing Geometry Concepts</li> </ul>   | <ol style="list-style-type: none"> <li>Area</li> <li>Symmetry</li> </ol>   |                                 |
| February 21 | <ul style="list-style-type: none"> <li>Chapter 11 – Ratios and Proportional Relationships</li> </ul>  | <ol style="list-style-type: none"> <li>Comparing ratios</li> <li>Solving proportions</li> <li>Foundations of trigonometry</li> </ol>                   | <b>Homework 2 Due</b>           |
| February 28 | <ul style="list-style-type: none"> <li>Chapters 15 &amp; 16 – Working with Data/ Concepts of Probability</li> </ul>   | <ol style="list-style-type: none"> <li>Representations</li> <li>Descriptive Statistics</li> <li>Theoretical and Experimental Probability</li> </ol>    | <b>Homework 3 Due</b>           |
| March 6     | <ul style="list-style-type: none"> <li>Chapter 12 – Algebraic Thinking: Expressions, Equations &amp; Functions</li> </ul>   | <ol style="list-style-type: none"> <li>Sequences and patterns</li> <li>Variables</li> <li>Function reasoning</li> <li>Constructing formulas</li> </ol> | <b>Homework 4 Due</b>           |
| March 13    | <ul style="list-style-type: none"> <li>Chapter 12 – Algebraic Thinking: Expressions, Equations &amp; Functions</li> </ul>   | <ol style="list-style-type: none"> <li>Functions and modeling</li> <li>Graphing</li> <li>The coordinate plane</li> </ol>                               |                                 |
| March 20    | <b>SPRING BREAK – NO CLASS</b>  |  |                                 |
| March 27    | <b>CEASAR CHAVEZ DAY – NO CLASS</b>   |  |                                 |
| April 3     | <i>MICROTEACHING</i>  |  | <b>Homework 5 Due</b>           |
| April 10    | <b>SPRING STUDY DAY – NO CLASS</b>  |  |                                 |
| April 17    | <i>MICROTEACHING</i>  |  |                                 |
| April 24    | <i>MICROTEACHING</i>  |  |                                 |
| May 1       | <i>MICROTEACHING</i>  |  |                                 |
| May 15th    | <b>Exam Week</b>  |  | <b>Activity Evaluations DUE</b> |