



## Southern Methodist University

### EDU 5XXX/6XXX| Semester

### Teaching Mathematics in Elementary School 2

Professor: <PROF_FULL_NAME>	Office:
Email: <PROF_EMAIL>	Office Hours:
Telephone: <PHONE>	Class Meeting Time:
Website: Course Canvas site, at <LINK>	Class Meeting Location:
<b>Required Textbooks:</b> <b>TD:</b> Van De Walle, J. A., Karp, K. S., & Bay-Williams, J. M. (2019). <i>Elementary and middle school mathematics: Teaching developmentally</i> (10 <sup>th</sup> ed.). Allyn & Bacon: Boston. <b>BMT:</b> Zager, T. (2017). <i>Becoming the Math Teacher You Wish You'd Had: Ideas and Strategies from Vibrant Classrooms</i> . Stenhouse Publishers.	

#### Course Description

This course is designed to prepare teachers to evaluate, plan, and deliver math lessons that are appropriate for learners from early childhood to 6th grade as well as assess student math knowledge and skills through a student-centered, inquiry approach. Students will be introduced to methods for teaching all children developmentally appropriate topics in Measurement, Geometry, and Data Analysis (three of the five NCTM content Standards).

**Credit Hours:** 3.00

The Department of Education requires that universities meet universal standards per hour of academic credit awarded to students. The federal definition of a credit hour is 15 contact hours, plus 30 outside hours, or the equivalent. SACSCOC's credit hour policy follows from the federal policy (<https://sacscoc.org/app/uploads/2019/08/Credit-Hours.pdf>).

#### Student Learning Outcomes

Students will develop content knowledge, pedagogical knowledge, and pedagogical content knowledge.

#### Texas Teacher Standards

##### **Standard 2--Knowledge of Students and Student Learning.**

(C) Teachers facilitate each student's learning by employing evidence-based practices and concepts related to learning and social-emotional development.

(i) Teachers understand how learning occurs and how learners develop, construct meaning, and acquire knowledge and skills.

**Standard 3--Content Knowledge and Expertise.** Teachers exhibit a comprehensive understanding of their content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and their ability to match objectives and activities to relevant state standards.

(A) Teachers understand the major concepts, key themes, multiple perspectives, assumptions, processes of inquiry, structure, and real-world applications of their grade-level and subject-area content.

(i) Teachers have expertise in how their content vertically and horizontally aligns with the grade-level/subject-area continuum, leading to an integrated curriculum across grade levels and content areas.

(ii) Teachers identify gaps in students' knowledge of subject matter and communicate with their leaders and colleagues to ensure that these gaps are adequately addressed across grade levels and subject areas.

(iii) Teachers keep current with developments, new content, new approaches, and changing methods of instructional delivery within their discipline.

(B) Teachers design and execute quality lessons that are consistent with the concepts of their specific discipline, are aligned to state standards, and demonstrate their content expertise.

(i) Teachers organize curriculum to facilitate student understanding of the subject matter.

(ii) Teachers understand, actively anticipate, and adapt instruction to address common misunderstandings and preconceptions.

(iii) Teachers promote literacy and the academic language within the discipline and make discipline-specific language accessible to all learners.

(C) Teachers demonstrate content-specific pedagogy that meets the needs of diverse learners, utilizing engaging instructional materials to connect prior content knowledge to new learning.

(i) Teachers teach both the key content knowledge and the key skills of the discipline.

(ii) Teachers make appropriate and authentic connections across disciplines, subjects, and students' real-world experiences.

### **Texas State Board for Educator Certification Mathematics Generalist EC-6 Standards**

**Standard III. Geometry and Measurement:** *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.*

**Standard IV. Probability and Statistics:** *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.*

**Standard V. Mathematical Processes:** *The mathematics teacher understands and uses mathematical processes to reason mathematically, to solve mathematical problems, to make mathematical connections within and outside of mathematics, and to communicate mathematically.*

**Standard VI. Mathematical Perspectives:** *The mathematics teacher understands the historical development of mathematical ideas, the interrelationship between society and mathematics, the structure of mathematics, and the evolving nature of mathematics and mathematical knowledge.*

**Standard VII. Mathematical Learning and Instruction:** *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.*

**Standard VIII. Mathematical Assessment:** 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.

**Standard IX. Professional Development:** The mathematics teacher understands mathematics teaching as a profession, knows the value and rewards of being a reflective practitioner, and realizes the importance of making a lifelong commitment to professional growth and development.

### Mapping Between SLOs and Course Activities:

Student Learning Outcome	Course Activities
Texas Teacher Standard 2	Cognitive Interview Project Final Examination Problem-Based Lesson Project Readings and Class Activities
Texas Teacher Standard 3A	Final Examination Problem-Based Lesson Project Readings and Class Activities
Texas Teacher Standard 3B	Midterm Mathigon Project Final Examination Problem-Based Lesson Project Readings and Class Activities
Texas Teacher Standard 3C	Midterm Mathigon Project Final Examination Problem-Based Lesson Project Readings and Class Activities
Math Generalist Standards III-IV	Cognitive Interview Project Midterm Mathigon Project Final Examination Problem-Based Lesson Project Readings TD Chapters 18-21
Math Generalist Standard V	Final Examination Problem-Based Lesson Project Readings and Class Activities
Math Generalist Standard VI	Readings and Class Activities
Math Generalist Standard VII	Cognitive Interview Project Midterm Mathigon Project Readings and Class Activities
Math Generalist Standard VIII	Cognitive Interview Project Final Examination Problem-Based Lesson Project Readings and Class Activities
Math Generalist Standard IX	Final Examination Problem-Based Lesson Project

### Course Policies

#### Attendance Policy

Given the way in which this class is listed and approved, we cannot offer virtual attendance options without violating SMU's state certification license. A small percentage of our classes will be virtual for everyone, as is allowed by state policies. The remainder of our class meetings will be held only face-to-face. It is important that you attend class meetings, as this course is based around learning by participating in live activities and discussions. Fully-documented university-excused absences are not penalized. However, I understand that life is complicated sometimes in ways that university-excused absences do not capture. You can miss one class meeting with no penalty and no documentation needed, as long as you complete all classwork assignments for that day's module on Canvas. **Please inform me via email prior to missing a class meeting. You do not need to give a reason why.** If you think you will miss more than one class, please let me know (email is fine), and we can together come to an arrangement that makes

sense in your situation and allows you to be successful. Note that when you attend a class, your classwork assignment turn-in on Canvas for the day will usually be your written solutions to or discussion of one activity we did. However, if you miss the class meeting, you must turn in your solutions to and discussion of **all** activities done during that class meeting's module as your turn-in on Canvas.

If you miss 3 or more in-person class meetings (assuming the course meets once per week for a regular semester), the instructor reserves the right to assign an F as your grade in the course. This number is 6 if the course meets twice a week for a regular semester, and 9 if the course meets three times a week for a regular semester.

### **Statement on Communication**

You may contact the instructor via SMU email or the Canvas inbox. During the work week, the instructor will respond to your question or email within 48 hours. The instructor does not typically respond to emails on holidays and weekends. Assignments will be graded within 1 week of the assignment due date. This grading timeline might be delayed for long essays and complex projects.

### **Policy on Use of Generative AI on Class Assignments**

You may responsibly use Generative AI programs, such as Chat-GPT, to assist you in completing any of the assignments in this course. All assignments are designed so that a program like Chat-GPT could provide a useful outline or starting draft, but such that the program would not be able to get a passing grade on its own if it completed the assignment. You as the student take full responsibility for the impact of any errors that the generative AI makes in its responses on your assignment's grade. You also take full responsibility on issues of bias related to the use of generative AI, and their impact on your assignment's grade.

## **Title IX and Disability Accommodations**

### **Disability Accommodations**

Students who need academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call <PHONE> or visit [smu.edu/DASS](https://smu.edu/DASS) to begin the process. Once they are registered and approved, students then submit a DASS Accommodation Letter through the electronic portal, *DASS Link*, and then communicate directly with each of their instructors to make appropriate arrangements. Please note that accommodations are not retroactive, but rather require advance notice in order to implement.

### **Sexual Harassment**

All forms of sexual harassment, including sexual assault, dating violence, domestic violence and stalking, are violations of SMU's Title IX Sexual Harassment Policy and may also violate Texas law. Students who wish to file a complaint or to receive more information about the grievance process may contact Samantha Thomas, SMU's Title IX Coordinator, at <EMAIL> or <PHONE>. Please note that faculty and staff are mandatory reporters. If students notify faculty or staff of sexual harassment, they must report it to the Title IX Coordinator. For more information about sexual harassment, including resources available to assist students, please visit [smu.edu/sexualmisconduct](https://smu.edu/sexualmisconduct).

### **Pregnant and Parenting Students**

Under Title IX, students who are pregnant or parenting may request academic adjustments by contacting the Office of Student Advocacy and Support by calling <PHONE>. Students seeking assistance must schedule an appointment with their professors as early as possible, present a letter from the Office of the Dean of Students, and make appropriate arrangements. Please note that academic adjustments are not retroactive and, when feasible, require advance notice to implement.



## Academic Policies

### Religious Observance

Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. [Click here for a list of holidays.](#)

### Medical-Related Absences

To ensure academic continuity and avoid any course penalties, students should follow procedures described by their instructors in order to be provided with appropriate modifications to assignments, deadlines, and exams.

### Excused Absences for University Extracurricular Activities

Students participating in an officially sanctioned, scheduled university extracurricular activity should be given the opportunity to make up class assignments or other graded assignments that were missed as a result of their participation. It is the responsibility of the student to make arrangements for make-up work with the instructor prior to any missed scheduled examinations or other missed assignments. (See current [Catalog](#) under heading of "Academic Records/Excused Absences.")

### Final Exams

Final course examinations shall be given in all courses where appropriate, and some form of final assessment is essential. Final exams and assessments must be administered as specified in the official examination schedule. Exams cannot be administered or due during the last week of classes or during the Reading Period. Syllabi must state clearly the form of the final exam or assessment, and the due date and time must match the official SMU exam schedule. Final exams are not required to be provided online.

### Academic Dishonesty

Students are expected to embrace and uphold the [SMU Honor Code](#). Violations of the Honor Code will be acted upon in accordance with the policies and procedures outlined in the [Mustang Student Handbook](#).

## Student Support Services

### Student Academic Success Programs

Students needing assistance with writing assignments for SMU courses may schedule an appointment with the Writing Center through Canvas. Students who would like support for subject-specific tutoring or success strategies should contact SASP, Loyd All Sports Center, Suite 202; <PHONE>; [smu.edu/sasp](http://smu.edu/sasp).

### Caring Community Connections Program

CCC is a resource for anyone in the SMU community to refer students of concern to the Office of the Dean of Students. The online referral form can be found at [smu.edu/deanofstudentsccc](http://smu.edu/deanofstudentsccc). After a referral form is submitted, students will be contacted to discuss the concern, strategize options, and be connected to appropriate resources. Anyone who is unclear about what steps to take if they have concerns about students should contact the Office of the Dean of Students at <PHONE>.

### Mental Health Resources: On-Call and Ongoing Counseling Services

Throughout the academic year, students may encounter different stressors or go through life experiences which impact their mental health and academic performance. Students who are in distress or have concerns about their mental health can schedule a same-day or next-day appointment to speak with a counselor by calling [Counseling Services](#). Counselors are available at any time, day or night for students



in crisis at this number: <PHONE> (then select option 2) They will be connected with a counselor immediately. Students seeking ongoing counseling should call the same number (<PHONE>, then select option 1) during normal business hours to schedule an initial appointment.

### Campus Carry Law

In accordance with Texas Senate Bill 11, also known as the ‘campus carry’ law, and following consultation with entire University community, SMU chooses to remain a weapons-free campus. Specifically, SMU prohibits possession of weapons (either openly or in a concealed manner) on campus. For more information, please see: [smu.edu/campuscarrylaw](http://smu.edu/campuscarrylaw).

### Assignments

Assessment of student performance on course objectives and content is determined by the following activities and assignments.

Assignments	Percent of Grade
Homework: Mini-Lessons, Discussion Board	20
Cognitive Interview Project	15
Classwork	20
Midterm Examination Project	20
Final Examination Project	25
<b>Total</b>	<b>100</b>

#### 1. *Homework Assignments (20% of grade):*

- a. *TD Reading Activities:* When you read sections from your TD textbook on topics like fractions or Base-10, you will be asked to design your own unique mini-activity on each topic for elementary students in your desired grade level. These activities should be based on the principles and research covered in the reading, but should be original to you and your future classroom. You may use generative AI to get ideas, but the lesson plans will not be awarded credit unless they reference specific pages and passages from the weekly reading. You will present your activity to the class each week.
- b. *Discussion Board Reflections:* We will also be reading chapters from BMT and other books. You will be asked to write a reflection on each of these reading assignments and post it on the discussion board. You will also be asked to respond to the reflections of two other class members.

#### 2. *Classwork (20% of grade)*

Various classwork assignments will be given during class. Your work on these assignments may be submitted on paper, or via google docs/sheets/slides, or as a submission on Canvas.

#### 3. *Cognitive Interview Project (15% of grade)*

You will conduct the geometry and measurement interviews we covered in class with one student. You will submit tables (from the interview protocol) and your notes on what they did to solve each problem, as well as 2 paragraphs where you reflect and plan future instruction for that student. Remember, for the geometry interview you will need pattern blocks. For the measurement interview, you will need two sizes of paperclips, square tiles, and a ruler. You can check these materials out from me.



[Measurement Interview Protocol](#)  
[Geometry Interview Protocol](#)

#### 4. Midterm Examination Project (20% of Grade)

Undergraduate Students: Design an original Mathigon activity related to Geometry, Measurement, or Probability and Statistics. Your activity can be a short, simple warm-up activity, or a more complicated activity. Submit a link to the activity you created to the instructor, along with (1) why you decided to use Mathigon in the way you did, (2) what kinds of students and what kinds of circumstances the activity is intended to be implemented in.

Masters Students: Implement an existing Mathigon activity, lesson plan, or Polypad in your classroom. You can also fulfill this project by implementing a lesson that utilizes Mathigon's virtual manipulatives (note: students must be using the manipulatives, not just a presenting teacher). Your submission should include (1) a link to the activity/manipulatives, (2) 3 examples of student work completing the activity, and (3) a paragraph outlining how the activity went when you implemented it. If you have difficulty getting access to a classroom to implement the activity in, please see the instructor.

#### 5. Final Examination Project (25% of Grade)

Two to four students (depending on class size) will develop an ORIGINAL problem-based investigation that will be taught during our class. This must be a task that matches the "Doing Mathematics" level in the Level of Cognitive Demand framework. Each person/group will sign up for a mathematical topic on which the activity will be developed. This problem-solving activity should cover a topic from elementary mathematics, but should be complex/difficult enough to keep students in our class engaged. Examples will be provided that strike this balance. This project has the following elements (also see rubrics):

- Lesson Plan: Should include, at a minimum the following: title, concept/topic to be taught, standards, materials/resources. It must contain the step-by-step procedures – including the *before*, *during*, and *after* phases of the lesson as described in the lesson plan format in TD.
- Revised Lesson Plan: The group must revise their lesson plan based on instructor feedback.
- Presentation: The group will teach their lesson to the class on one of two presentation days. The lesson should last approximately 30 minutes. Group members will be evaluated on how well they implement a problem-based philosophy.
- Reflection: Each student will individually submit a reflection on how the lesson went (see rubric)
- Contributions Sheet: Each student will state what themselves and their group members contributed to this project. Group members who did not contribute appropriately will have a reduced grade, or in extreme circumstances will receive no credit.

*(For Masters students, this is a potential Master's Project)*

#### Grading Scale

**Grades:** Grades will be available through Canvas and students may access them to determine where they stand in this course at any time. Your grade will be calculated according to given assignment weights. Please make sure to check your grade book to see your instructors feedback on your projects and activities. To see in-line feedback, go to the assignment, then click on View Feedback if applicable. It is your responsibility to check for your instructor's feedback and make appropriate improvements to assignments if necessary.

94 – 100 = A	90 – 93 = A-	87 – 89 = B+
83 – 86 = B	80 – 82 = B-	79 = C+

77 – 78 = C	75 – 76 = C-	72 – 73 = D
74 = D+	70 – 71 = D-	> 70 = F

### Rubrics

#### Rubric: Cognitive Interview Project

Category	Points Possible
Gives child's age, grade level, and any other relevant background information about child. Do not give child's name. Also state which two interviews were administered to the child.	1
Include copies or originals of student work for all tasks	1
Include interview sheets from both tasks, with all blanks, tables, and notes, etc. filled in, and all questions answered	2
Describe the child's thinking for each topic area, including the types of problems given, the strategy the child used to solve each problem, and whether they were successful or unsuccessful at solving the problems.	2
Interpret the child's understanding of each topic, using chapters we've covered in TD and TCM, as well as articles we've read for homework or in class. Cites specific page numbers and gives specific quotes when referring to these references. Uses readings and evidence from the interview to justify ideas about each child's level of understanding	4
Include 1-2 paragraphs where you reflect on what you learned from conducting this interview: What went well? What didn't go well? What did I learn about the child from conducting this interview? How could I use an interview like this to decide on what sort of instruction to give the child? Are problem solving interviews a tool that classroom teachers could use?	2
For each of the two topics, describe what you would give this child as a follow-up activity to further build upon and extend their understanding of the topic. Write each of your two extensions as short lesson plans (0.5-1 page each) that include the specific problems and activities you will pose to the student.	4
<b>Presentation:</b> In class on you will be asked to discuss what happened during your interview with a small group of students from our class. If you are present during this discussion, and have a copy of your report with you at this time, you will get full credit for the presentation.	5
<b>TOTAL</b>	20

Note: Failure to return any borrowed manipulatives by the project due date will result in 7 points taken off your project grade.

#### Rubric: Midterm Examination Project (Undergraduate)

	Target 4 points	Acceptable 2 points	Needs Improvement 0 points	Points earned
Connection to Content Standards	Relevant TEKS are cited for the designed activity.	TEKS are incomplete.	No TEKS are given.	4
Usability	The simulation is relatively easy to use and understand, and	The simulation is clunky or difficult to use.	The simulation is not set up properly to allow	4



	designed with children in mind.		students to learn the target concepts.	
Appropriateness	The simulation uses Mathigon to accomplish something that could not be easily accomplished without Mathigon.	The simulation uses Mathigon to allow for distance learning of a typical math activity.	The simulation is a basic math drill worksheet in Mathigon form.	4
Mathematical Accuracy	The simulation is set up to allow students to explore mathematical concepts that are accurate and clear.	The simulation has some minor problematic elements.	The simulation has major mathematical inaccuracies.	4
Justification	Clear description of why the student decided to use Mathigon in the way they did.	Description is brief or unclear.	Missing	4
Context	Clear description of kinds of students and what kinds of circumstances the activity is intended to be implemented in.	Description is brief or unclear.	Missing	4
TOTAL				/24

**Rubric: Midterm Examination Project (Masters)**

	Target 4 points	Acceptable 2 points	Needs Improvement 0 points	Points earned
Link to Activity/ PolyPad	A link is provided that allows the instructor to complete the task given to your class.	An image of the task is provided.	No task is provided.	4
Student Work	Images of 3 examples of student work on the activity are provided, with appropriate narrative explaining them.	Fewer examples are provided, or narrative descriptions are missing.	Missing.	4
Reflection	A paragraph is including describing how the activity went when it was implemented, including	The reflection paragraph is short, incomplete, or difficult to understand.	Missing.	4

	things that went well and things that could be improved.			
TOTAL				/12

**Rubric: Final Exam Project**

Category	Points Possible
<b>Lesson Plan: Background Info</b> Title of the lesson: Concept/Topic To Teach: TEKS/NCTM/CCSS Standards Addressed: (choose 1) (1 point) Required Materials:	1
<b>Lesson Plan: Before Phase</b> <ol style="list-style-type: none"> <li>1. Discuss how you will activate prior knowledge</li> <li>2. Discuss how you will go over the instructions and make sure the task is understood.</li> <li>3. Discuss how you will establish clear expectations for the task.</li> </ol>	3
<b>Lesson Plan: During Phase</b> <ol style="list-style-type: none"> <li>1. Discuss how you will notice students' mathematical thinking – what questions will you ask?</li> <li>2. Discuss how you will provide appropriate support – what misconceptions or difficulties might students have, and how will you deal with them? How can you support struggling learners without compromising the task?</li> <li>3. Discuss how you will provide worthwhile extensions – what if there is a group that finishes in 10 minutes?</li> </ol>	4
<b>Lesson Plan: After Phase</b> <ol style="list-style-type: none"> <li>1. Discuss how you will promote a mathematical community of learners and listen actively without evaluation (note: see “Orchestrating Classroom Discourse” section of Chapter 3).</li> <li>2. Discuss how you will summarize the main ideas. What are the big ideas from this lesson that you want students to take away?</li> </ol>	2
<b>Lesson Plan Revision</b> Student/group successfully revised lesson plan within one week of receiving instructor comments. All instructor feedback was taken into account.	5
<b>Lesson Plan Presentation</b> <ul style="list-style-type: none"> <li>• ALL group members are verbally participating in the teach, asking questions etc.</li> <li>• Group members encourage ALL of the students in the class to participate</li> <li>• Group members successfully respond to questions</li> <li>• Group members stay true to the problem-based lesson format (including using talk moves to orchestrate classroom discourse)</li> </ul>	5
<b>Lesson Plan Reflection and Contributions</b> Written reflection on the lesson emailed to the instructor within 48 hours of your presentation. Your reflection should respond to the following questions: <ul style="list-style-type: none"> <li>• <i>What went well in our lesson? What didn't go so well?</i></li> <li>• <i>If I taught this same lesson again, what would I do differently?</i></li> <li>• <i>What did this experience teach me about being a teacher?</i></li> </ul>	5

<ul style="list-style-type: none"> <li>• <i>How do I feel about using a problem-based model for instruction?</i></li> </ul> <p>Each group member must turn in a contributions sheet on the day of the teach. If the contribution sheets reveal that a group member did not pull their weight, points may be deducted from that group member's project grade, up to the point of that member not receiving any credit.</p>	
<b>TOTAL:</b>	20

### Tentative Calendar

Week	Topics	Assignments
Week 1	<i>Topic: Introduction to Geometry and Measurement</i>	
Week 2	<i>Topic: Learning about Measurement</i> TD Chapter 18: Developing Measurement Concepts BMT Chapter 1	TD Chapter 18 presentation BMT Chapter 1 Reflection
Week 3	<i>Topic: Technology for Teaching Geometry and Measurement</i> TD Chapter 7: Using Technological Tools to Teach Mathematics Introduction to Mathigon for Geometry/Measurement BMT Chapter 2	TD Chapter 7 reflection BMT Chapter 2 reflection
Week 4	<i>Topic: The Role of Definition in Geometry</i> TD Chapter 19: Developing Geometric Thinking and Geometric Concepts BMT Chapter 3	TD Chapter 19 presentation BMT Chapter 3 Reflection
Week 5	<i>Topic: Shapes, Parallel and Perpendicular</i> Routine: Which One Doesn't Belong	Cognitive Interview Project Due
Week 6	<i>Topic: Transformations, Spatial Reasoning, and Subitizing</i> Routine: Visual Patterns Routine: Visual Fraction Talks BMT Chapter 4	BMT Chapter 4 Reflection
Week 7	<i>Topic: Nets, Area/Volume</i> BMT Chapter 5	BMT Chapter 5 Reflection
Week 8	<i>Topic: Geometric Connections Across the Curriculum</i> TD Chapter 4: Planning in the Problem-Based Classroom <b>Q&amp;A: Planning your Problem-Based Lesson</b>	Midterm Examination Project Due
Week 9	<i>Topic: Introduction to Measures of Center and Spread</i> TD Chapter 20: Developing Concepts of Data Analysis Ms. Lucas' Armspan BMT Chapter 6	TD Chapter 20 presentation BMT Chapter 6 Reflection
Week 10	<i>Topic: Developing Concepts of Data Analysis</i> TD Chapter 5: Creating Assessments for Learning BMT Chapter 7	TD Chapter 5 reflection BMT Chapter 7 Reflection
Week 11	<i>Topic: Probability in Elementary Mathematics</i> TD Chapter 21: Exploring Concepts of Probability BMT Chapter 8	TD Chapter 21 presentation BMT Chapter 8 Reflection
Week 12	<i>Topic: Using Models and Simulations to Teach Probability and Statistics</i>	BMT Chapter 9 Reflection

	Introduction to Mathigon for Probability/Statistics BMT Chapter 9	
Week 13	<i>Topic: Data Science in the Elementary Mathematics Classroom</i> BMT Chapter 10	BMT Chapter 10 Reflection
Week 14	Content Wrap-up or Mursion Simulation	
Week 15	<b>Final Exam Presentations</b>	<b>Final Projects Due</b>