



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

<b>Title of Course:</b> ELED 4310 (18899) Teaching Mathematics in Elementary Classrooms	<b>Credits:</b> 3
<b>Semester:</b> Fall 2020	<b>Instructor Information:</b> <b>Professor:</b> Dr. David J. Carrejo, Ph.D. <b>Office:</b> College of Education, EDUC 802 <b>Phone:</b> 747-5856 <b>E-mail:</b> <a href="mailto:dcarrejo@utep.edu">dcarrejo@utep.edu</a> (best means of contact) <b>Office Hours:</b> T 9:30 a.m. – 11:30 a.m., R 9:30 a.m. – 11:30 a.m., or by appointment
<b>Class meeting time:</b> M 12:00 p.m. – 2:50 p.m. <b>Class meeting place:</b> Hybrid/Remote Learning Any face-to-Face meetings will take place virtually.	

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

**I. Course Description**

Students enrolled in this course will explore the methods of teaching mathematics in elementary grades. Emphasis is placed on the equity principle (mathematics for all) and development of conceptual understanding of topics such as operations on real numbers, quantitative reasoning, geometry, and early algebra. Students will reflect upon their own experiences and beliefs about mathematics. The course looks at mathematics as a discipline, and compares 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.

**II. Course Objectives and Learning Outcomes**

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

## STUDENT LEARNING OUTCOMES

TEXAS TEACHING STANDARDS [SBEC] ELED 4310 students will be able to:	COURSE SPECIFIC STANDARDS ELED 4310 students will be able to:	Measurements (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>	<ul style="list-style-type: none"> <li>• Homework assignments</li> <li>• Lesson design</li> </ul>
<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>	<ul style="list-style-type: none"> <li>• Homework assignments</li> <li>• Lesson design</li> </ul>
<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>	<ul style="list-style-type: none"> <li>• Homework assignments</li> <li>• Lesson design</li> </ul>
<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>	<ul style="list-style-type: none"> <li>• Homework assignments</li> <li>• Lesson design</li> </ul>
<p><b>Standard VII. Mathematical Learning and Instruction:</b> 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>	<ul style="list-style-type: none"> <li>• Lesson design</li> <li>• Reflections</li> </ul>
<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>	<ul style="list-style-type: none"> <li>• Lesson design</li> <li>• Reflections</li> </ul>

### III. Learning Modules:

This course is designed using a **modular format**—that is, each week is “packaged” as a single module so that all the materials, lecture notes, submission areas, discussion posts are in one area for a given week.

### IV. 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 3-5 \(Volume II\), 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.

### V. Technology Requirements

Course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop, scanner, a webcam, and a microphone. You will need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP’s Microsoft Office Portal. Click the following link for more information about [Microsoft Office 365](#) and follow the instructions.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#) as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

### VI. Statement Regarding COVID-19 Precautions

The University of Texas at El Paso requires everyone to wear a mask in common spaces, or where two or more individuals are located, including, but not limited to, classrooms. You must wear a mask covering your nose and mouth at all times in this class. If you choose not to wear a mask, you may not enter the classroom. If you remove your mask, you will be asked to put it on and/or leave the classroom. Students who refuse to wear a mask and/or follow preventive COVID-19 guidelines will be dismissed from the class and will be subject to disciplinary action according to Section 1.2.3 Health and Safety and Section 1.2.2.5 Disruptions as defined in the UTEP Handbook of Operating Procedure.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website (<https://screening.utep.edu>). The website will verify if you are permitted to attend class in-person. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection.

Please note that if COVID-19 conditions deteriorate in the City of El Paso, all course and lab activities will be transitioned to remote delivery.

## **VII. 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).

## **VIII. 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.

## **IX. 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).

## X. Evaluation & Coursework Requirements of Students:

Coursework Requirements	Points
Homework Assignments – 6 x 20 pts	120
Discussion Questions – 6 x 10 pts	60
Complete 5 hours of video observation	50
Observation summative reflection	30
Lesson Planning and Instructional Design with Reflection	40
<b>TOTAL</b>	<b>300</b>

How Grades are Determined	
Grade	Percentage (%)
A	90 - 100
B	80 - 89.9
C	70 - 79.9
D	60 - 69.9
F	Below 60

## XI. Course Assignments

### 1. Video Observations

You are required to complete a minimum of 5 hours of video observation (focusing on mathematics instruction at different grade levels). You will maintain a log of the hours observed, and you will take observation notes. All documents will be turned in at the end of the semester together with a **2-page summative reflection of your observations**. These hours are required by the Texas Education Agency as part of your pathway to certification and must be earned prior to your enrollment in student teaching. Links to videos will be made available according to the class calendar. A log sheet and note sheet will be made available to you.

### 2. Discussion Questions

Submit an initial response to each of the prompts provided during each two-week module for a grade level. Each initial post should be substantive (approximately  $\frac{1}{2}$  of a page in length) and must be posted by midnight, Central Time on Sunday of the first week in the two-week module. In your substantive posts you are encouraged to use references (you may use your textbook); show evidence of critical thinking as it applies to the concepts or prompt and/or use examples of the application of the concepts to work and life.

You must reply to at least two different peers per prompt. Your replies should build on the concept discussed, offer a question to consider, or add a differing perspective, etc. Rather than responding with, "Good post," explain why the post is "good" (why it is important, useful, insightful, etc.). Or, if you disagree, respectfully share your alternative perspective. Just saying "I agree" or "Good idea" is not sufficient for the posts you would like graded. Your replies must be posted by midnight, Mountain Standard Time on Sunday of the second week in the two-week module.

### 3. Homework Assignments

There will be short homework assignments, primarily skills-based, throughout the semester. They will be posted on Blackboard and due on specified dates. The homework assignments will reflect not only the appropriate mathematics content for grades EC - 6 but also the content you should expect to see on your certification test.

### 4. Lesson Planning / Instructional Design (2 parts)

*Part I: Design a lesson:* Working in pairs, you will be required to create a series of lesson plans (mini-unit) for a given topic for a specific grade level that meets the following criteria: 1) it is appropriate for grades EC – 6; 2) it is aligned with selected Instructional Focus Documents (IFD) for mathematics; and 3) it is aligned with STAAR objectives as well as TEKS standards. Final topics and grade levels will be approved by me. You will receive constructive feedback in the form of written analysis from me.

*Part II: Reflect on your lesson design:* Working individually and analyzing your lesson design, you will write a Lesson Planning and Design Reflection. **Final goals, guidelines, and a rubric for this assignment are provided in this syllabus and will also be available on Blackboard.**

## **XII. Course Requirements**

- 1. Participation:** It is expected that students will actively participate in working on projects and class discussions. 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.
- 2. Due dates:** Assignments are due on the specified dates. Type or word-process written assignments. All assignments should be double spaced with a 12-point font. Number your pages.
- 3. 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.

## **XIII. Recommended Resources for Elementary School Mathematics:**

### **Mathematics Content:**

- [Math Is Fun](#)
- [Annenberg Learner](#)
- Assessment in Mathematics:
  - [Measuring What Counts: A Conceptual Guide for Mathematics Assessment](#)
  - [Mathematics Assessment Project - Assessing 21st Century Math](#)

### **Mathematics Standards:**

- [NCTM Principles and Standards for School Mathematics](#)
- [State of Texas Assessments of Academic Readiness \(STAAR™\) Resources](#)
- [TEKS for Mathematics](#)
- [Texas Educator Standards](#)

### **Lesson Resources** (Ctrl+Click to follow the link)

[Better Lesson](#)

[Big Learners](#)

[Early Algebra](#)

[Early Math Collaborative](#)

[Education.com](#)

[Fantastic Fun and Learning](#)

[Home School Math](#)

[K5Learning](#)

[Math Salamanders](#)

[My Teaching Station](#)

[PreKinders](#)

[PreK Pages](#)

### **Special Needs and Learning Disabilities:**

[LDonline](#)

[Dyscalculia](#)

[Choices for Learning](#)

[Technology Apps](#)

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

DATE	CHAPTER/TOPIC	ASSIGNMENT
<b>GRADES EC-K</b>		
<b>August 24 (F2F)</b>	<ul style="list-style-type: none"> <li>• <b>Welcome and introduction to the course</b></li> <li>• Counting &amp; comparing numbers</li> <li>• Modeling addition and subtraction</li> <li>• Money &amp; personal financial literacy</li> </ul>	Reading: Solarski (2018)
<b>August 31</b>	<ul style="list-style-type: none"> <li>• Sorting and classifying</li> <li>• Patterns</li> <li>• Non- standard measure (length, area, volume)</li> <li>• Picture graphs and bar graphs</li> </ul>	Reading: VDW pp. 340-344; 380-382; 411 – 415  <a href="#">Website: Big Ideas of Early Math</a>
<b>1<sup>st</sup> GRADE</b>		
<b>September 7</b>	<ul style="list-style-type: none"> <li>• Base-ten concepts</li> <li>• Introducing the number line</li> <li>• Addition and subtraction number sentences (equivalence)</li> <li>• Money &amp; personal financial literacy</li> </ul>	Reading: VDW pp. 120-122; 170-171; 182-193; 368  <b>Discussion 1 due</b> <b>Homework 1 due</b>
<b>September 14</b>	<ul style="list-style-type: none"> <li>• Venn diagrams</li> <li>• Composing and decomposing shapes</li> <li>• Tally graphs</li> </ul>	Reading: VDW pp. 380-389
<b>2<sup>nd</sup> GRADE</b>		
<b>September 21</b>	<ul style="list-style-type: none"> <li>• Odd and even numbers</li> <li>• Addition and subtraction of two digit numbers</li> <li>• Simple fractions</li> <li>• Personal financial literacy</li> </ul>	Reading: VDW pp. 120-122; 171-173; 217-231  <b>Discussion 2 due</b> <b>Homework 2 due</b>
<b>September 28</b>	<ul style="list-style-type: none"> <li>• Estimation</li> <li>• Standard units of measure (length and area)</li> <li>• Time</li> <li>• Line Plots</li> </ul>	Reading: VDW pp. 343-349; 351-354; 380-385; 417-418  <b>Video 1 observation due</b>
<b>3<sup>rd</sup> GRADE</b>		
<b>October 5</b>	<ul style="list-style-type: none"> <li>• Computational estimation</li> <li>• Number line model and area model for operations</li> <li>• Two and multi-step problems with multiplication and division</li> <li>• Tables and patterns</li> <li>• Personal financial literacy</li> </ul>	Reading: VDW pp. 172 -178; 187 – 198; 211-214; 217 – 231; 331 – 338  <b>Discussion 3 due</b> <b>Homework 3 due</b>
<b>October 12</b>	<ul style="list-style-type: none"> <li>• Standard units of measure (metric measure)</li> <li>• Area and perimeter</li> <li>• Composing and decomposing shapes</li> <li>• Time</li> <li>• Line plots</li> </ul>	Reading: VDW pp. 351 – 363; 380 – 394  <b>Video 2 observation due</b>
<b>4<sup>th</sup> GRADE</b>		
<b>October 19 (F2F)</b>	<ul style="list-style-type: none"> <li>• Introducing percentages</li> <li>• Models for fraction operations</li> <li>• Models for two digit operations</li> <li>• Equations with ‘unknowns’</li> <li>• Personal financial literacy</li> </ul>	Reading: VDW pp. 250 – 276; 301-306; 315-326  <b>Discussion 4 due</b> <b>Homework 4 due</b>

<b>October 26</b>	<ul style="list-style-type: none"> <li>• Angles</li> <li>• Spatial reasoning</li> <li>• Symmetry</li> <li>• Stem-and-leaf plots</li> </ul>	Reading: VDW pp. 364 – 366; 396 – 403  <b>Video 3 observation due</b>
<b>5<sup>th</sup> GRADE</b>		
<b>November 2</b>	<ul style="list-style-type: none"> <li>• Percentages</li> <li>• Introducing the coordinate plane</li> <li>• Introducing <math>y = mx + b</math></li> <li>• Adding and subtracting negative numbers</li> <li>• Constructing area formulas</li> <li>• Personal financial literacy</li> </ul>	Reading: VDW pp. 301-306; 355 – 359  <b>Discussion 5 due</b> <b>Homework 5 due</b>
<b>November 9</b>	<ul style="list-style-type: none"> <li>• Spatial reasoning (3D and volume)</li> <li>• Dilations</li> <li>• Simple transformations in the plane</li> <li>• The double number line</li> <li>• Scatterplots</li> </ul>	<b>Video 4 observation due</b>
<b>6<sup>th</sup> GRADE</b>		
<b>November 16</b>	<ul style="list-style-type: none"> <li>• The concept of function</li> <li>• Non-linear equations</li> <li>• Inequalities</li> <li>• Constructing area formulas</li> <li>• Personal financial literacy</li> </ul>	<b>Discussion 6 due</b> <b>Homework 6 due</b>
<b>November 23</b>	<ul style="list-style-type: none"> <li>• Ratio and proportion</li> <li>• Box plots</li> </ul>	<b>Video 5 observation due</b>
<b>November 30</b>	<ul style="list-style-type: none"> <li>• Using technology in the mathematics classroom</li> </ul>	
<b>December 7</b>	<b>EXAM WEEK</b>	<b>Video observation log, notes, and observation reflection due</b>  <b>Lesson plans and lesson reflections due</b>



## Appendix A: 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.**

## Appendix B: GUIDELINES FOR LESSON PLANNING & DESIGN REFLECTION

Analyze your **lesson design**, or the structure of the lesson itself. When you think about the design of your lesson, you are mostly thinking about the plan before you put it into practice. Write a reflection paper (**giving specific examples from your lesson plan**), reflecting in depth as you ask yourself the following questions. Your final reflection paper must be at least 2 pages in length.

- What is the purpose of this lesson?

Asking this question helps you ensure that you clearly understand your teaching objectives. If you can answer this question, then you will know whether you have accomplished your goals at the lesson's end.

- What challenges do you foresee in teaching this lesson?

Thinking through potential obstacles in advance helps you redesign aspects of your lesson that might be especially hard for students to access.

- How are you addressing diversity?

This question helps you ensure that over the course of the week, you build activities that meet the needs of the wide range of learners in front of you.

- How will you know whether this lesson is effective?

Asking about efficacy in advance helps you prepare informal assessment tools that will allow you to understand whether students are grasping the content.

### Appendix C: 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 insure 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 insure 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 insure 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.

### Appendix D: RUBRIC FOR LESSON PLANNING & DESIGN REFLECTION

Criteria/Standard	5 - Exceeds expectations	4 - Meets Expectations	3 - Emergent	1-2 - Meets Minimum Expectations
<b><i>Depth of Reflection</i></b>	Response demonstrates an in-depth reflection on, and personalization of, the theories, concepts, and/or strategies presented in the lesson plan and implementation.	Response demonstrates a general reflection on, and personalization of, the theories, concepts, and/or strategies presented in the lesson plan and implementation.	Response demonstrates a minimal reflection on, and personalization of, the theories, concepts, and/or strategies presented in the lesson plan and implementation.	Response demonstrates a lack of reflection on, or personalization of, the theories, concepts, and/or strategies presented in the lesson plan and implementation.
<b><i>Viewpoints</i></b>	Viewpoints and interpretations are insightful and well supported. Clear, detailed examples are provided, as applicable.	Viewpoints and interpretations are supported. Appropriate examples are provided, as applicable	Viewpoints and interpretations are unsupported or supported with flawed arguments. Examples, when applicable, are not provided or are irrelevant to the assignment.	Viewpoints and interpretations are missing, inappropriate, and/or unsupported. Examples, when applicable, are not provided.
<b><i>Evidence and Practice</i></b>	Essay shows strong evidence of synthesis of ideas presented and insights gained in this assignment. The implications of these insights for the respondent's overall teaching practice are thoroughly detailed.	Essay shows evidence of synthesis of ideas presented and insights gained in this assignment. The implications of these insights for the respondent's overall teaching practice are presented.	Essay shows little evidence of synthesis of ideas presented and insights gained in this assignment. Few implications of these insights for the respondent's overall teaching practice are presented.	Essay shows no evidence of synthesis of ideas presented and insights gained in this assignment. No implications for the respondent's overall teaching practice are presented.
<b><i>Self-Evaluations</i></b>	Self-evaluation shows personal development related to goals set for this assignment.	Self-evaluation shows assessment of progress connected goals set for this assignment.	Self-evaluation shows evidence of assessment of progress connected goals set for this assignment. However, they are not specific	Self-evaluation is generalized, superficial and not connected to goals set for this assignment.
<b><i>Mechanics</i></b>	Writing is clear, concise, and well organized with excellent sentence/paragraph construction. Thoughts are expressed in a coherent and logical manner. There are no more than three spelling, grammar, or syntax errors per page of writing.	Writing is mostly clear, concise, and well organized with good sentence/paragraph construction. Thoughts are expressed in a coherent and logical manner. There are no more than five spelling, grammar, or syntax errors per page of writing.	Writing is unclear and/or disorganized. Thoughts are not expressed in a logical manner. There are more than five spelling, grammar, or syntax errors per page of writing.	Writing is unclear and disorganized. Thoughts ramble and make little sense. There are numerous spelling, grammar, or syntax errors throughout the response.