EDUC 4043/4403 - Teaching Math in Elementary School
West College of Education
COURSE SYLLABUS
Fall 2022, revised Aug 2022

INSTRUCTOR INFORMATION

Instructor: Dr. Dittika Gupta, Associate Professor
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Preferred Form of Communication: GroupMe and email

Instructor Response Policy

We will be working and communicating constantly throughout the semester. Email is great however you will also be a part of class GroupMe which will provide more flexibility in communication. I will try my best to answer all emails and texts within 24 hours, however you will definitely get a response within 48 hours (2 days). Any emails or texts received during weekends will not receive a response till the following Monday. No emails or texts will be answered over the weekend.

COURSE INFORMATION

Materials – Online Resources, Readings, Supplementary Readings
Textbooks –None. Numerous links and files will be provided within the course.

Course Description

Assessment and models of instructional planning in math, emphasis on learning with technology and the models of instruction. Field experience required. (Refer undergraduate catalog, MSU.)
This field-based, 3-credit course focuses on elementary school mathematics pedagogy with an emphasis on instructional strategies and models, the use of technology in the learning/teaching process, effective practices, professionalism, curriculum, and lesson design. Different teaching strategies include appropriate use of creative approaches to the learning/teaching process, cooperative learning, direct instruction, inquiry, concept attainment, co-teaching concepts, and so on.

How to navigate this course

1) Modules are arranged in correspondence with Learning Outcomes (LO).
2) Read the overview of the course.

3) Start with the module “Read Me First!” The module includes the syllabus and a quiz. You should score 100% for the quiz to start the first module, M1. You may retake the quiz any number of times.
4) You should start at Module 1 and finish the module at your own pace.
5) At the end of the module, there are two assignments.
6) You can move on to the next module when you score an 80% or more in both the module assignments.
7) Every module follows the same pattern. There will be assignments at the end of each module. You should score at least 80% in each assignment to finish the module and to move on to the next module.
8) After you successfully complete Module 3, you can start the assignments related to observation (Field Module). Important! You will not be able to start your field module until you finish Module 3 successfully. You should contact your pre-determined mentor teacher to observe and teach in their classroom.
9) Once you finish all the modules, you will be able to navigate to the “FINAL PROJECT” module. You should score at least 80% in the final project to successfully complete the course.

Competency List

This course will build mastery of the following standards. The detailed breakdown of the standards across the modules are listed in the learning objectives section.

Commissioner's Standards

Commissioner's Standard 1--Instructional Planning and Delivery.

Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today’s learners.

Commissioner's Standard 2—Knowledge of Students and Student Learning.

Teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student’s educational developmental backgrounds and focusing on each student’s needs.

Commissioner's 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.

Commissioner's Standard 4— Learning Environment.

Teachers interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning.

Commissioner's Standard 5— Data-Driven Practice.

Teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze

multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.

Commissioner's Standard 6—Professional Practices and Responsibilities.

Teachers consistently hold themselves to a high standard for individual development, pursue leadership opportunities, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity.

Content Standards PK-3 [19 TAC §235.13(d)] Mathematics.

The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

Exam Frame Work PK-3

Domain III – Educating All Learners:

Competency 006 (Differentiation Strategies in Planning and Practice)

Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

Competency 007 (Culturally Responsive Practices):

Understand how to identify and implement culturally responsive, developmentally appropriate practices to effectively teach and engage young children from prekindergarten to grade 3 across all content areas.

Domain IV – Data-Driven Practice and Formal/Informal Assessment

Competency 008 (Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

Domain V – Learning Across the Curriculum

Competency 011 (Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

Domain VI – Analysis and Response

Competency 014 (Analysis and Response): In a written response, analyze and interpret qualitative and quantitative data to identify a given student's strengths and needs and design developmentally appropriate instruction.

PPR PK-3 Standards.

Standard 19 TAC §235.11(b) Instructional Planning and Delivery.

Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students and makes learning relevant for today's learners.

Standard 19 TAC §235.11(c) Knowledge of Student and Student Learning.

Early Childhood: Prekindergarten-Grade 3 classroom teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational and developmental backgrounds and focusing on each student's needs.

Standard 19 TAC §235.11(d) Content Knowledge and Expertise

Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards.

Standard 19 TAC §235.11(e) Learning Environment

Early Childhood: Prekindergarten-Grade 3 classroom teachers interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning.

Standard 19 TAC §235.11(f) Data-Driven Practices

Early Childhood: Prekindergarten-Grade 3 classroom teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.

Standard 19 TAC §235.11(g) Professional Practices and Responsibilities.

Early Childhood: Prekindergarten-Grade 3 classroom teachers consistently hold themselves to a high standard for individual development, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity.

Technology Applications Standards.

Standard VII

All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum:

Student Learning Outcomes arranged by modules

The teacher-students' learning outcomes are arranged by modules.

M1 – Review of Standards

Upon completion of this course, the teacher-student will be able to

LO1: DVLACC011A Demonstrate knowledge of the Mathematics domain of the Texas Prekindergarten Guidelines and the Texas Essential Knowledge and Skills (TEKS) for Mathematics (Kindergarten through Grade 5), as well as ways to scaffold and sequence skills and concepts to teach mathematics to young children.

In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's Standard 1--Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners. (A) Teachers design clear, well organized, sequential lessons that build on students' prior knowledge.
i. Teachers develop lessons that build coherently toward objectives based on course content, curriculum scope and sequence, and expected student outcomes. (C.S.1.A.i)
ii. Teachers effectively communicate goals, expectations, and objectives to help all students reach high levels of achievement. (C.S.1.A.ii)

Commissioner's 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. (C.S.3.A.i)

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

PPR PK-3 Standard 19 TAC §235.11(d) Content Knowledge and Expertise
Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(1) 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; PPR.S.19.TAC.235.11(d)(1)

M2 – Mathematical Learning Foundations (Young Learners) (Includes Assessment, Using Assignments)

LO2: DVLACC011B. Demonstrate knowledge of foundational characteristics and processes in children's mathematical development, including elements of mathematical understanding (e.g., conservation, one-to-one correspondence, counting, cardinality), and indicators that a student may be experiencing difficulties or demonstrating advanced abilities in mathematics.

In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's Standard 1--Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners. (A) Teachers design clear, well organized, sequential lessons that build on students' prior knowledge.
iii. Teachers connect students' prior understanding and real-world experiences to new content and contexts, maximizing learning opportunities. (C.S.1.A.iii)

Commissioner's Standard 1--Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners.
(F) Teachers consistently check for understanding, give immediate feedback, and make lesson adjustments as necessary.
i. Teachers monitor and assess student progress to ensure that their lessons meet students' needs. (C.S.1.F.i)
ii. Teachers provide immediate feedback to students in order to reinforce their learning and ensure that they understand key concepts. (C.S.1.F.i)
iii. Teachers adjust content delivery in response to student progress through the use of developmentally appropriate strategies that maximize student engagement. (C.S.1.F.i)

(Assessment) Commissioner's Standard 2—Knowledge of Students and Student Learning. Teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational developmental backgrounds and focusing on each student's needs.
(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. (C.S.2.C.i)
ii. Teachers identify readiness for learning and understand how development in one area may affect students' performance in other areas. (C.S.2.C.ii)
iii. Teachers apply evidence-based strategies to address individual student learning needs and differences, adjust their instruction, and support the learning needs of each student. (C.S.2.C.iii)

Commissioner's Standard 5— Data-Driven Practice. Teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.
(A) Teachers implement both formal and informal methods of measuring student progress.

i. Teachers gauge student progress and ensure student mastery of content knowledge and skills by providing assessments aligned to instructional objectives and outcomes that are accurate measures of student learning. (C.S.5.A.i)
ii. Teachers vary methods of assessing learning to accommodate students' learning needs, linguistic differences, and/or varying levels of background knowledge. (C.S.5.A.i)

(B) Teachers set individual and group learning goals for students by using preliminary data and communicate these goals with students and families to ensure mutual understanding of expectations.
i. Teachers develop learning plans and set academic as well as social-emotional learning goals for each student in response to previous outcomes from formal and informal assessments. (C.S.5.B.i)
ii. Teachers involve all students in self-assessment, goal setting, and monitoring progress. (C.S.5.B.ii)
iii. Teachers communicate with students and families regularly about the importance of collecting data and monitoring progress of student outcomes, sharing timely and comprehensible feedback so they understand students' goals and progress. (C.S.5.B.ii)

(C) Teachers regularly collect, review, and analyze data to monitor student progress.
i. Teachers analyze and review data in a timely, thorough, accurate, and appropriate manner, both individually and with colleagues, to monitor student learning. (C.S.5.C.i)
ii. Teachers combine results from different measures to develop a holistic picture of students' strengths and learning needs. (C.S.5.C.ii)

(D) Teachers utilize the data they collect and analyze to inform their instructional strategies and adjust short- and long-term plans accordingly.
i. Teachers design instruction, change strategies, and differentiate their teaching practices to improve student learning based on assessment outcomes. (C.S.5.D.i)
ii. Teachers regularly compare their curriculum scope and sequence with student data to ensure they are on track and make adjustments as needed. (C.S.5.D.ii)

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

Exam Frame Work PK-3 Domain IV – Data-Driven Practice and Formal/Informal Assessment
Competency 008 (Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

C. Apply knowledge of ways to develop and select developmentally appropriate assessments and assessment strategies (e.g., use of TEA resources such as formative assessment banks), ensure that assessments are aligned to instructional objectives and outcomes, and use assessment results to inform instruction and measure student progress throughout the content areas. (EF Dom IV Comp 008.C)

Exam Frame Work PK-3 Domain VI – Analysis and Response
Competency 014 (Analysis and Response): In a written response, analyze and interpret qualitative and quantitative data to identify a given student's strengths and needs and design developmentally appropriate instruction.
A. Demonstrate the ability to analyze and interpret formative and summative observational and assessment data for a given student in order to select and accurately describe a significant strength or need that the student demonstrates related to a foundational English language arts, mathematics, or science skill or objective. (EF Dom VI Comp 014.A)

B. Demonstrate the ability to select and accurately describe a developmentally appropriate, effective instructional strategy, intervention, or enrichment to build on a student's identified strength or address a student's identified need in the foundational English language arts, mathematics, or science skill or objective. (EF Dom VI Comp 014.B)

C. Using sound reasoning and knowledge of foundational English language arts, mathematics, or science skills, demonstrate the ability to explain the effectiveness of the selected instructional strategy, intervention, or enrichment to build on a student's identified strength and/or address a student's identified need. (EF Dom VI Comp 014.C)

D. Demonstrate the ability to select and accurately describe a developmentally appropriate method of informal assessment to effectively monitor the student's progress toward the identified learning skill or objective. (EF Dom VI Comp 014.D)

E. Demonstrate the ability to explain how the specific learning skill or objective in foundational English language arts, mathematics, or science can be integrated in other areas of the curriculum to support the generalization or enrichment of the identified learning skill or objective. (EF Dom VI Comp 014.E)

PPR PK-3 Standard 19 TAC §235.11(f) Data-Driven Practices
Early Childhood: Prekindergarten-Grade 3 classroom teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(1) gauge student progress and ensure mastery of content knowledge and skills by providing assessments aligned to instructional objectives and outcomes that are accurate measures of student learning; Standard 19 TAC §235.11(f)(1)

(2) analyze and review data in a timely, thorough, accurate, and appropriate manner, both individually and with colleagues, to monitor student learning; Standard 19 TAC §235.11(f)(2)
(3) design instruction, change strategies, and differentiate their teaching practices to improve student learning based on assessment outcomes. Standard 19 TAC §235.11(f)(3)

M3 – Strategies/activities in teaching mathematics to young children – Pre-Field Content Knowledge / Differentiation

LO3: DVLACC011C. Apply knowledge of developmentally appropriate strategies and activities, including the progression of conceptual to procedural understanding specific to areas of mathematical content (e.g., number sense, numeracy, whole-number operations, geometry, spatial sense, fractions, algebraic reasoning), and mathematical language for developing children's knowledge and skills in these areas through a variety of meaningful, authentic learning experiences and real-world applications.

In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's Standard 1--Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners. (B) Teachers design developmentally appropriate, standards-driven lessons that reflect evidence-based best practices.
i. Teachers plan instruction that is developmentally appropriate, is standards driven, and motivates students to learn.

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

Exam Frame Work PK-3 Domain III – Educating All Learners:
Competency 006 (Differentiation Strategies in Planning and Practice): Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

A. Demonstrate knowledge of the principles of universal design for learning (UDL) and how to apply UDL guidelines to incorporate the flexibility necessary to maximize learning opportunities for all students. (EF Dom III Comp 006.A)
B. Apply knowledge of effective methods for fostering students' active participation and individual academic success in one-to-one, small-group, and large-group settings and

for facilitating students' inclusion in various settings (e.g., academic, social). (EF Dom III Comp 006.B)
C. Apply knowledge of activities and instruction that build on students' individual interests, primary language, experiences, and prior knowledge; respond to students' strengths and needs; and promote the development of prerequisite skills and positive dispositions toward learning in the content areas. (EF Dom III Comp 006.C)
D. Demonstrate knowledge of how and when to adjust and scaffold instruction, instructional activities, and assessment in response to various types of feedback from young children. (EF Dom III Comp 006.D)

Competency 007 (Culturally Responsive Practices): Understand how to identify and implement culturally responsive, developmentally appropriate practices to effectively teach and engage young children from prekindergarten to grade 3 across all content areas.
C. Demonstrate knowledge of activities, approaches, and resources that encourage and support exploration and engagement and promote a positive disposition toward learning for all students. (EF Dom III Comp 007.C)

Standard 19 TAC §235.11(d) Content Knowledge and Expertise
Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(5) understand, actively anticipate, and adapt instruction to address common misunderstandings and preconceptions;

Pre-Field

The students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's 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.
(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.

€ 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.

Tech Application Standards:
Standard VII: All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum:
7.1k planning techniques to ensure that students have time to learn the Technology Applications TEKS in order to meet grade-level benchmark expectations;
7.2k where to find and how to use technological resources to implement the TEKS, to support instruction, to extend communication, to enhance classroom management, and to become more productive in daily tasks;
7.3k instructional strategies for teaching the Technology Applications TEKS and for integrating them into the curriculum;
7.4k strategies that students with diverse strengths and needs can use to determine word meaning in content-related texts;
7.5k strategies that students with diverse strengths and needs can use to develop content-area vocabulary;
7.6k strategies that students with diverse strengths and needs can use to facilitate comprehension before, during, and after reading content-related texts;
7.7k how to evaluate the effectiveness of technology-based instruction; and
7.8k how to set goals for ongoing professional development in teaching the Technology Applications TEKS and integrating them into the curriculum.
7.1s use a range of instructional strategies for individuals and small/whole groups to plan applications-based technology lessons;
7.2s identify and address equity issues related to the use of technology, including but not limited to gender, ethnicity, language, disabilities, and student access to technology;
7.3s plan, select, and implement instruction that allows students to use technology applications in problem-solving and decision-making situations;
7.4s use technology applications to develop and implement tasks that emphasize collaboration and teamwork among members of a structured group or project team;
7.5s provide adequate time for teaching the Technology Applications TEKS;
7.6s identify and use resources to keep current with technology education;
7.7s create project-based learning activities that integrate the Technology Applications TEKS into the curriculum and meet the Technology Applications TEKS benchmarks;
7.8s follow guidelines for the legal and ethical use of technology resources;
7.9s select and use developmentally appropriate instructional practices, activities, and materials to improve student learning of the Technology Applications TEKS;
7.10s use a variety of instructional strategies to ensure all students' reading comprehension of content-related texts, including helping students link the content of texts to their lives and connect related ideas across
7.11s locate, retrieve, and retain content-related information from a range of texts and technologies;

7.12s use appropriate sources, such as dictionaries, thesauruses, glossaries, and search engines to locate the meanings and pronunciations of unfamiliar content-related words;
7.13s use technology tools to perform administrative tasks such as taking attendance, maintaining grade books, and facilitating communication;
7.14s use formal and informal assessment methods to evaluate appropriately students' projects and portfolios;
7.15s collect observable and measurable data to gauge student progress and adjust instruction in Technology Applications;
7.16s conduct an ongoing self-assessment of strengths and weaknesses in the knowledge and skills of Technology Applications;
7.17s develop and implement an individual plan for professional growth in the knowledge and skills of Technology Applications; and
7.18s incorporate new strategies to improve classroom instruction in Technology Applications.

Field Module – Field Hours (TK20) & Observation Assignments
In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.
LOs 1-10,
Commissioner's 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.
(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.

Commissioner's Standard 6—Professional Practices and Responsibilities. Teachers consistently hold themselves to a high standard for individual development, pursue leadership opportunities, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity.
(A) Teachers reflect on their teaching practice to improve their instructional effectiveness and engage in continuous professional learning to gain knowledge and skills and refine professional judgment.
i. Teachers reflect on their own strengths and professional learning needs, using this information to develop action plans for improvement.
ii. Teachers establish and strive to achieve professional goals to strengthen their instructional effectiveness and better meet students' needs.

iii. Teachers engage in relevant, targeted professional learning opportunities that align with their professional growth goals and their students' academic and social-emotional needs.

(B) Teachers collaborate with their colleagues, are self-aware in their interpersonal interactions, and are open to constructive feedback from peers and administrators.
i. Teachers seek out feedback from supervisors, coaches, and peers and take advantage of opportunities for job-embedded professional development.
ii. Teachers actively participate in professional learning communities organized to improve instructional practices and student learning.

€ Teachers seek out opportunities to lead students, other educators, and community members within and beyond their classrooms.
i. Teachers clearly communicate the mission, vision, and goals of the school to students, colleagues, parents and families, and other community members.
ii. Teachers seek to lead other adults on campus through professional learning communities, grade- or subject-level team leadership, committee membership, or other opportunities.

(D) Teachers model ethical and respectful behavior and demonstrate integrity in all situations.
i. Teachers adhere to the educators' code of ethics in §247.2 of this title (relating to Code of Ethics and Standard Practices for Texas Educators), including following policies and procedures at their specific school placement(s).
ii. Teachers communicate consistently, clearly, and respectfully with all members of the campus community, including students, parents and families, colleagues, administrators, and staff.
iii. Teachers serve as advocates for their students, focusing attention on students' needs and concerns and maintaining thorough and accurate student records.

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

PPR PK-3 Standard 19 TAC §235.11(b) Instructional Planning and Delivery
Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students and makes learning relevant for today's learners. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(1) develop lessons that build coherently toward objectives based on course content, curriculum scope and sequence, and expected student outcomes;

(2) effectively communicate goals, expectations, and objectives to help all students reach high levels of achievement;
(3) connect students' prior understanding and real-world experiences to new content and contexts, maximizing learning opportunities;
(4) plan instruction that is developmentally appropriate, is standards driven, and motivates students to learn;
(5) differentiate instruction, aligning methods and techniques to diverse student needs, including acceleration, remediation, and implementation of individual education plans;
(6) plan student groupings, including pairings and individualized and small-group instruction, to facilitate student learning;
(7) integrate the use of oral, written, graphic, kinesthetic, and/or tactile methods to teach key concepts;
(8) ensure that the learning environment features a high degree of student engagement by facilitating discussion and student-centered activities as well as leading direct instruction;
(9) encourage all students to overcome obstacles and remain persistent in the face of challenges, providing them with support in achieving their goals;
(10) set high expectations and create challenging learning experiences for students, encouraging them to apply disciplinary and cross-disciplinary knowledge to real-world problems;
(11) provide opportunities for students to engage in individual and collaborative critical thinking and problem solving;
(12) monitor and assess students' progress to ensure that their lessons meet students' needs;
(13) provide immediate feedback to students in order to reinforce their learning and ensure that they understand key concepts; and
(14) adjust content delivery in response to student progress through the use of developmentally appropriate strategies that maximize student engagement.

Standard 19 TAC §235.11(d) Content Knowledge and Expertise
Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(7) teach both the key content knowledge and the key skills of the discipline

PPR PK-3 Standard 19 TAC §235.11(g) Professional Practices and Responsibilities
Early Childhood: Prekindergarten-Grade 3 classroom teachers consistently hold themselves to a high standard for individual development, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:

(A) reflect on their own strengths and professional learning needs, using this information to develop action plans for improvement;
(2) seek out feedback from supervisor, coaches, and peers and take advantage of opportunities for job-embedded professional development;
(3) adhere to the educators' code of ethics in §247.2 of this title (relating to Code of Ethics and Standard Practices for Texas Educators), including following policies and procedures at their specific school placement(s);
(4) communicate consistently, clearly, and respectfully with all members of the campus community, administrators, and staff; and
(5) serve as advocates for their students, focusing attention on students' needs and concerns and maintaining thorough and accurate student records.
Tech Application Standards:
Standard VII: All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum:
7.1k planning techniques to ensure that students have time to learn the Technology Applications TEKS in order to meet grade-level benchmark expectations;
7.2k where to find and how to use technological resources to implement the TEKS, to support instruction, to extend communication, to enhance classroom management, and to become more productive in daily tasks;
7.3k instructional strategies for teaching the Technology Applications TEKS and for integrating them into the curriculum;
7.4k strategies that students with diverse strengths and needs can use to determine word meaning in content-related texts;
7.5k strategies that students with diverse strengths and needs can use to develop content-area vocabulary;
7.6k strategies that students with diverse strengths and needs can use to facilitate comprehension before, during, and after reading content-related texts;
7.7k how to evaluate the effectiveness of technology-based instruction; and
7.8k how to set goals for ongoing professional development in teaching the Technology Applications TEKS and integrating them into the curriculum.
7.1s use a range of instructional strategies for individuals and small/whole groups to plan applications-based technology lessons;
7.2s identify and address equity issues related to the use of technology, including but not limited to gender, ethnicity, language, disabilities, and student access to technology;
7.3s plan, select, and implement instruction that allows students to use technology applications in problem-solving and decision-making situations;
7.4s use technology applications to develop and implement tasks that emphasize collaboration and teamwork among members of a structured group or project team;
7.5s provide adequate time for teaching the Technology Applications TEKS;
7.6s identify and use resources to keep current with technology education;
7.7s create project-based learning activities that integrate the Technology Applications TEKS into the curriculum and meet the Technology Applications TEKS benchmarks;
7.8s follow guidelines for the legal and ethical use of technology resources;

7.9s select and use developmentally appropriate instructional practices, activities, and materials to improve student learning of the Technology Applications TEKS;
7.10s use a variety of instructional strategies to ensure all students' reading comprehension of content-related texts, including helping students link the content of texts to their lives and connect related ideas across
7.11s locate, retrieve, and retain content-related information from a range of texts and technologies;
7.12s use appropriate sources, such as dictionaries, thesauruses, glossaries, and search engines to locate the meanings and pronunciations of unfamiliar content-related words;
7.13s use technology tools to perform administrative tasks such as taking attendance, maintaining grade books, and facilitating communication;
7.14s use formal and informal assessment methods to evaluate appropriately students' projects and portfolios;
7.15s collect observable and measurable data to gauge student progress and adjust instruction in Technology Applications;
7.16s conduct an ongoing self-assessment of strengths and weaknesses in the knowledge and skills of Technology Applications;
7.17s develop and implement an individual plan for professional growth in the knowledge and skills of Technology Applications; and
7.18s incorporate new strategies to improve classroom instruction in Technology Applications.

M4 – Student Engagement & Instructional Resources (Include Learning Environment)

LO4: DVLACC011D. Demonstrate knowledge of instructional resources, tools, and materials, including manipulatives, children's literature, and technology for teaching mathematics.

LO5: DVLACC011E. Apply knowledge of ways to build on children's interests by creating meaningful opportunities and experiences that promote the development of students' conceptual understanding and mathematical thinking, including incorporating play and manipulatives into daily activities.

In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's Standard 1—Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners.
(B) Teachers design developmentally appropriate, standards-driven lessons that reflect evidence-based best practices.
ii. Teachers use a range of instructional strategies, appropriate to the content area, to make subject matter accessible to all students.

iii. Teachers use and adapt resources, technologies, and standards-aligned instructional materials to promote student success in meeting learning goals.

€ Teachers design lessons to meet the needs of diverse learners, adapting methods when appropriate.
i. Teachers differentiate instruction, aligning methods and techniques to diverse student needs, including acceleration, remediation, and implementation of individual education plans.
ii. Teachers plan student groupings, including pairings and individualized and small-group instruction, to facilitate student learning.
iii. Teachers integrate the use of oral, written, graphic, kinesthetic, and/or tactile methods to teach key concepts.

€ Teachers promote complex, higher-order thinking, leading class discussions and activities that provide opportunities for deeper learning
iii. Teachers incorporate technology that allows students to interact with the curriculum in more significant and effective ways, helping them reach mastery.

Commissioner's Standard 4— Learning Environment. Teaches interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning.
(A) Teachers create a mutually respectful, collaborative, and safe community of learners by using knowledge of students' development and backgrounds.
i. Teachers embrace students' backgrounds and experiences as an asset in their learning environment.
ii. Teachers maintain and facilitate respectful, supportive, positive, and productive interactions with and among students.
iii. Teachers establish and sustain learning environments that are developmentally appropriate and respond to students' needs, strengths, and personal experiences.

(B) Teachers organize their classrooms in a safe and accessible manner that maximizes learning.
i. Teachers arrange the physical environment to maximize student learning and to ensure that all students have access to resources.
ii. Teachers create a physical classroom set-up that is flexible and accommodates the different learning needs of students.

€ Teachers establish, implement, and communicate consistent routines for effective classroom management, including clear expectations for student behavior.
i. Teachers implement behavior management systems to maintain an environment where all students can learn effectively.
ii. Teachers maintain a strong culture of individual and group accountability for class expectations.
iii. Teachers cultivate student ownership in developing classroom culture and norms.

(D) Teachers lead and maintain classrooms where students are actively engaged in learning as indicated by their level of motivation and on-task behavior.

A. Teachers maintain a culture that is based on high expectations for student performance and encourages students to be self-motivated, taking responsibility for their own learning.

ii. Teachers maximize instructional time, including managing transitions.
iii. Teachers manage and facilitate groupings in order to maximize student collaboration, participation, and achievement.

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

PPR PK-3 Standard 19 TAC §235.11€ Knowledge of Student and Student Learning
Early Childhood: Prekindergarten-Grade 3 classroom teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational and developmental backgrounds and focusing on each student's needs. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:

(A) create a community of learners in an inclusive environment that views differences in learning and background as educational assets;

Standard 19 TAC §235.11€ Learning Environment
Early Childhood: Prekindergarten-Grade 3 classroom teachers interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:

(A) embrace students' backgrounds and experiences as an asset in their learning;
(2) maintain and facilitate respectful, supportive, positive, and productive interactions with and among students;
(3) establish and sustain learning environments that are developmentally appropriate and respond to students' needs, strengths, and personal experiences;
(4) create a physical classroom set-up that is flexible and accommodates the different learning needs of students;
(5) implement behavior management systems to maintain an environment where all students can learn effectively;
(6) maintain a culture that is based on high expectations for student performance and encourages students to be self-motivated, taking responsibility for their own learning;
(7) maximize instructional time, including managing transitions;
(8) manage and facilitate groupings in order to maximize student collaboration, participation, and achievement;

M5 – Developing Mathematical Thinkers

LO6: DVLACC011F. Apply knowledge of teaching practices that enhance children's mathematical problem solving and reasoning and promote their ability to represent, communicate, and connect mathematical ideas in their everyday lives.

LO7: DVLACC011G. Apply knowledge of developmentally appropriate strategies for encouraging students to view themselves as competent mathematical thinkers and activities for promoting students' ability to think and communicate mathematically.

In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's Standard 1—Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners.
(D) Teachers communicate clearly and accurately and engage students in a manner that encourages students' persistence and best efforts.
i. Teachers ensure that the learning environment features a high degree of student engagement by facilitating discussion and student-centered activities as well as leading direct instruction.
ii. Teachers validate each student's comments and questions, utilizing them to advance learning for all students.
iii. Teachers encourage all students to overcome obstacles and remain persistent in the face of challenges, providing them with support in achieving their goals.
€ Teachers promote complex, higher-order thinking, leading class discussions and activities that provide opportunities for deeper learning
ii. Teachers provide opportunities for students to engage in individual and collaborative critical thinking and problem solving.

Commissioner's Standard 2—Knowledge of Students and Student Learning. Teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational developmental backgrounds and focusing on each student's needs.
(A) Teachers demonstrate the belief that all students have the potential to achieve at high levels and support all students in their pursuit of social-emotional learning and academic success.
I. Teachers purposefully utilize learners' individual strengths as a basis for academic and social-emotional growth.
ii. Teachers create a community of learners in an inclusive environment that views differences in learning and background as educational assets.
iii. Teachers accept responsibility for the growth of all of their students, persisting in their efforts to ensure high levels of growth on the part of each learner.

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

Standard 19 TAC §235.11(d) Content Knowledge and Expertise
Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(6) promote literacy and the academic language within the discipline and make discipline-specific language accessible to all learners;

M6 – Integrated Learning

LO8: DVLACC011H. Apply knowledge of approaches for integrating mathematical content with other areas of the curriculum and with everyday activities, including written expression.

LO9: DVLACC011J. Demonstrate knowledge of developmentally appropriate activities for teaching mathematical language, vocabulary, and key concepts specific to financial literacy.

In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's Standard 1--Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today’s learners.
(E) Teachers promote complex, higher-order thinking, leading class discussions and activities that provide opportunities for deeper learning
i. Teachers set high expectations and create challenging learning experiences for students, encouraging them to apply disciplinary and cross-disciplinary knowledge to real-world problems.

Commissioner's 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.

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

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

Standard 19 TAC §235.11(d) Content Knowledge and Expertise
Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(8) make appropriate and authentic connections across disciplines, subjects, and students' real world experiences.

M7 – Professional Collaboration / Students' Background Knowledge (Families) Include research (prior knowledge, …)

LO10: DVLACC011I. Demonstrate knowledge of ways to foster collaboration with families and with other professionals to promote and encourage all students' development of mathematical thinking and numeracy.

In addition, the students will be able to comprehend, demonstrate, and apply (as the case may be in each standard) the objectives of the following standards.

Commissioner's Standard 2—Knowledge of Students and Student Learning. Teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational developmental backgrounds and focusing on each student's needs.
(B) Teachers acquire, analyze, and use background information (familial, cultural, educational, linguistic, and developmental characteristics) to engage students in learning
i. Teachers connect learning, content, and expectations to students' prior knowledge, life experiences, and interests in meaningful contexts.
ii. Teachers understand the unique qualities of students with exceptional needs, including disabilities and giftedness, and know how to effectively address these needs through instructional strategies and resources.

iii. Teachers understand the role of language and culture in learning and know how to modify their practices to support language acquisition so that language is comprehensible and instruction is fully accessible.

Commissioner's 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.
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.

(D) Teachers lead and maintain classrooms where students are actively engaged in learning as indicated by their level of motivation and on-task behavior.
iv. Teachers communicate regularly, clearly, and appropriately with parents and families about student progress, providing detailed and constructive feedback and partnering with families in furthering their students' achievement goals.

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

Standard 19 TAC §235.11(c) Knowledge of Student and Student Learning
Early Childhood: Prekindergarten-Grade 3 classroom teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational and developmental backgrounds and focusing on each student's needs’ Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(2) connect learning, content, and expectations to students' prior knowledge, life experiences, and interests in meaningful contexts;

(3) understand the unique qualities of students with exceptional needs, including disabilities and giftedness, and know how to effectively address these needs through instructional strategies and resources;

(4) understand the role of language and culture in learning and know how to modify their practice to support language acquisition so that language is comprehensible and instruction is fully accessible;

PPR PK-3
Standard 19 TAC §235.11(d) Content Knowledge and Expertise
Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(2) 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;
(3) keep current with developments, new content, new approaches, and changing methods of instructional delivery within their discipline;

Final Project

Content Standards PK-3. [19 TAC §235.13(d)] Mathematics. The Early Childhood: Prekindergarten-Grade 3 classroom teachers demonstrate understanding of Kindergarten-Grade 5 Mathematics TEKS, with an emphasis on Kindergarten-Grade 3, and Mathematics Texas Prekindergarten Guidelines and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

Standard 19 TAC §235.11(d)
Content Knowledge and Expertise
Early Childhood: Prekindergarten-Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards. Early Childhood: Prekindergarten-Grade 3 classroom teachers must:
(4) organize curriculum to facilitate student understanding of the subject matter;

In addition, all the standards mentioned above in all the modules will be addressed in the Final Project.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Must be able to use D2L, Microsoft, and Google Suites.

Field Hours

Teacher-student should complete at least 40 cumulative field hours. Student should record the field hours in TK20. More details will be provided.

Observations

Student-teacher is required to have three teaching observations. Each observation should be done in a pre-determined mentor teacher's classroom. There are three essential components for each observation.

1) Pre-Conference

Teacher-student should schedule a pre-conference with the instructor before the observation. You may use zoom.us for the conference. Submit the lesson plan, teaching materials, evaluation instruments, documents, and technology applications that you plan for the lesson **BEFORE** the pre-conference. You may email the instructor to schedule the pre-conference. These have to be in-person physically or via zoom.

2) Recorded teaching in mentor teacher's classroom.

Teacher-student should record his/her teaching in the mentor teacher's classroom. The teacher-student should teach appropriate grade level classroom after getting approval from the instructor, as part of their pre-conference. The *recorded video of teaching* should be submitted for evaluation along with appropriate *reflections*. The templates for the lesson plan and reflections can be found in the corresponding module. You will also find the rubric for the observation and the T-TESS evaluation instrument in the module.

3) Post-Conference

Teacher-student should schedule a post-conference with the instructor after the instructor evaluate your video-taped teaching. The observation is not complete without a successful post-conference. You may use zoom.us for the conference. These have to be in-person physically or via zoom.

Performance-Based Final Project – One Week Lesson Plan (Unit Plan)

See the details for this required project in the Assessments section.

Important Note on Course Requirements

The Final Project for this course assesses your overall knowledge of the learning outcomes for this course. ***A score of 80 percent or higher on the Final Project is required to demonstrate competency.***

If the 15-week term ends and you do not complete all competencies, you will receive a grade of "F" and will be required to complete the remaining competencies in the next term.

INSTRUCTIONAL METHODS

This is an online Competency Based Education (CBE) course. Learning activities include assorted reading and videos, discussions (pre and post conferences), recorded observations, reflections, field hours, and a final project, namely, the Unit Plan. The field hours should be recorded in TK20 after getting teacher-approval.

Student Responsibilities or Tips for Success in the Course

To be successful in this course, plan to spend at least 3 hours a day to read/listen to online content, prepare for the observation lessons, teach classes (record these classes), complete assignments, and study the course material.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89%

D = 60%-79%

F = Below 60%

Assessments

Performance-Based Final Project – One Week Lesson Plan (Unit Plan) (200 points) & Vertical Alignment Plan (200 points)

For this project you will choose any one topic and one grade level (K-3) and create one week's lesson plan (unit plan) to teach the topic. Refer the rubric and the guidelines in the final project module to score well in the final project.
For Vertical Alignment Plan, you will choose three similar TEKS from different grade levels and prepare a vertical alignment plan (details are available in the module).

Assignments related to Observation:

OBSERVATION LESSON PLAN (100 points)

(Submit in D2L before pre-conference. The final version of the same should be posted in D2L before 11:30 pm on the day of your observation class.)
You have learned how to plan a lesson. You will put the theory of lesson plan making into practice during this semester when you apply the plan in the classrooms. Details of the lesson plan requirements, template, and the rubric can be found in the corresponding module.

CLASSROOM TEACHING OBSERVATION (100 points) (Submit class videos)

This is the evaluation of your observation class, based on the observation rubric in the corresponding module. The recorded video of the classroom teaching should be submitted the same day (before 11:30 pm) of teaching.

TEACHING REFLECTION (50 points)

(DUE 11:30 pm ON THE SAME DAY of your observation class in D2L.)
The prompts for the reflection paper will be provided. Use Times New Roman, 12-point font, and 2-line spacing. Length will not be considered but writing should explain/ reveal your thoughts and insights. Prompts are provided to make your reflection insightful.

TECHNOLOGY INTEGRATION CRITIQUE (50 points)

(From the submitted class videos. You will not submit any separate document for this assignment). I will provide a feedback for this assignment in the "Classroom Teaching Observation" Dropbox. However, the grade for this assignment will be given separately. This is the evaluation of the technology integration in your observed class, based on ISTE 2a and ISTE 2d. The details and the rubrics found in the corresponding module.

Field Hours.

The teacher-student should record the field-hours (along with Teacher approval) in TK20 in a timely manner.

Module Assignments.

- The teacher-student should submit the module assignments promptly.
- Each assignment carries 25 points.
- There are seven module assignments (7 times 25 = 175 points).
- You should score at least 80% in each module assignment to move to the next module.
- If you will have two attempts on the assignments. A re-do of the assignment is allowed if you do not achieve 80% competency however INCOMPLETE assignments will not be graded. They will be counted as an attempt. A conference with the professor is required if 80% competency is not achieved to discuss areas that need attention and skill improvement.
- Plagiarized work of 30% or above will not be graded and receive a zero.
- You will finish the first ***three*** modules to start the "Field Module".
- You have to finish all modules (M1 to M7) to start the "FINAL PROJECT" module.

TECHNOLOGY REQUIREMENTS

LMS (Desire 2 Learn – D2L)

All course sections offered by MSU have a corresponding course shell in the D2L Online Learning Management System (LMS). See the technical requirements and associated system check in the webpage, D2L Technical Requirements

ACCESS AND NAVIGATION

You will need your username and password to log into the course. If you do not know your username or have forgotten your password, contact helpdesk@mwsu.edu. For more information on the MSU's IT services, see Information Technology.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor Coach.

Technical Support

If you are new to D2L or if you are having technical difficulty with any part of D2L, please contact Distance Education. Other support options can be found in their webpage.

DISPOSITION AND READING FEEDBACK

It is crucial that you read the feedback for your assignments and exhibit professionalism. There are a lot of moving pieces in this course such as certification requirements, IRB requirements, participants and research location, data analysis and many other things. I will support you to be successful and guide you throughout the course, however that requires you to read feedback, answer emails timely, show growth, and professionalism as needed for a masters student. The feedback will have instructions to improve your understanding of the topics that we discuss in our class, in

addition to pointing out the mistakes in the submitted assignments. I am happy to meet individually via phone, virtually, or in person to discuss feedback.

ACADEMIC HONESTY

Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individuals to whom credit is given) will not be considered. I use turnitin for the assignments as needed and D2L directly syncs with it (you do not have to do anything). You will be able to see the plagiarism percentage and are welcome to make changes and resubmit **BEFORE** the due date. Any plagiarism of 30% and above is too much and the assignment will not be graded, given a zero, and no make-up allowed!!!

ATTENDANCE/ PARTICPATION

Students should participate in all classes. Logging into D2L at least once a week and working diligently on assignments will be considered as your attendance for the week. In case of an emergency situation that will not allow you to log on to D2L, please let me know as early as possible. One week's absence will result in a loss of 20 points from your earned points. Two weeks' absences will result in 50 points loss, contact to the advisor, and alert being issued to graduate school and student services. Excessive absences might also result in instructor-drop, if required.

INSTRUCTOR DROP

As per the College policies, an instructor may drop a student any time during the semester for excessive absences, for consistently failing to meet class assignments, for an indifferent attitude, or for disruptive conduct. Instructor will give the student a verbal or written warning prior to dropping the student from the class. The instructor-drop takes precedence over the student-initiated course drop of a later date. The instructor will assign a grade of either WF or F through the first 8 weeks of this semester. After this period, the grade will be an F. The date the instructor drop form is received in the Office of the Registrar is the official drop date.

IMPORTANT DATES

Change of Schedule and Late Registration: August 22-25, 2022.
Final Deadline for May graduates to file for graduation: October 3, 2022
Last Day to drop with a grade of "W:" 4 pm, October24, 2022
Refer to the academic calendar for more details.

ONLINE COMPUTER REQUIREMENTS

Taking an online class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have

access to) a working computer in this class. Assignments are due by the due date, and personal computer technical difficulties will not be considered a reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings. Computers are available on campus in various areas of the buildings including the Clark Student Center (CSC). Your computer being down is not an excuse for missing a deadline!! There are many places to access your class! Our online classes can be accessed from any computer in the world which is connected to the internet. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student help desk available to you. The college cannot work directly on student computers due to both liability and resource limitations however they will be able to help you get connected to our online services.

CHANGE OF SCHEDULE

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

In order to demonstrate competency, you must achieve 80% or higher on each required competency assessment.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

UNIVERSITY SPECIFIC PROCEDURES

Student Conduct

Students are expected to uphold and abide by certain standards of conduct that form the basis of the Student Code of Conduct. These standards are embodied within a set of core values that include integrity, social justice, respect, community, and responsibility. When members of the MSU community fail to exemplify these values, campus conduct proceedings are used to assert and uphold the Student Code of Conduct. The Code of Student Conduct is described in detail in the Student Handbook. Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum.

Electronic Network Access

Students using the university network facilities and services will indemnify and hold harmless the university against any and all actions or claims of infringement of intellectual property rights arising from the use of a network-based service or facility provided by the university. Network access is provided by password control. All passwords are managed and controlled by Information Systems. See Student Handbook for specific policies on electronic network access.

Academic Dishonesty

Students at MSU are expected to maintain high standards of integrity and honesty in their scholastic work. For more details and the definition of academic dishonesty see the Student Handbook.

STUDENTS WITH DISABILITIES—ADA STATEMENT

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. It is the policy of Midwestern State University that no otherwise qualified person, on the basis of disability, be excluded from participation in, be denied the befits of, or be subject to discrimination under any education program, activity, or employment of the university. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Physical location: Room 168, Clark Student Center, 3410 Taft Blvd, Wichita Falls, TX 76308.
Phone: (940) 397-4140
Email: debra.higginbotham@msutexas.edu
Website: https://msutexas.edu/student-life/disability/

Nondiscrimination Notice

MSU will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

CAMPUS CONCEALED CARRY STATEMENT

MSU is committed to providing a safe and secure learning, working, and living environment for students, faculty, staff, and visitors, and to respecting the right of individuals who are licensed to carry a handgun where permitted by law. Individuals who are licensed to carry may do so on MSU's campus premises except in locations and at activities that are prohibited. The carrying of any handgun by an unlicensed person or the open carry of a handgun is not permitted in any place on MSU's campus premises. For more information on Carrying Concealed Handguns, see the Student Handbook

COURSE OUTLINE

The following is a tentative course outline. The instructor might modify the outline if required to modify instruction.

Module Topic	Materials to Read and Review	Assignments
M1 – Review of Standards – LO1: Review of TEKS (mathematics domain) and teaching mathematics to young children.	• How to create objectives and learning activities? • Standards to use in this module • Elementary Math TEKS • Technology Standards • Assessments connected to objectives/standards And other notes/resources	**Module 1 Assignment #1** **Module 1 Assignment #2** **(25 points each)**
M2 – Mathematical Learning Foundations (Young Learners) (Includes Assessment, Using Assignments) – LO2: Foundational characteristic and processes in children's mathematical development	• How do young students learn mathematics? • Youtube video: Why Early Childhood is the Right Time to Start Learning • Articles And other notes/resources	**Module 2 Assignment** **(25 points)**
M3 – Strategies/activities in teaching mathematics to young children – Pre-Field Content Knowledge / Differentiation – LO3: Developmentally appropriate strategies and activities in teaching mathematics to young children	• Teacher Centered v/s Learner Centered • Math content • Articles And other notes/resources	**Module 3 Assignment** **(25 points)**

Module Topic	Materials to Read and Review	Assignments
M4 – Student Engagement & Instructional Resources (Include Learning Environment) – LO4 & LO5: Instructional Resources, tools, and materials to teach mathematics to young children & Building children's interest to learn mathematics	• Technology in Elementary classrooms • Hands on activities • Manipulative used in instruction • Technology Resources • Virtual Manipulatives • Articles And other notes/resources	**Module 4 Assignment** **(25 points)**

M5 – Developing Mathematical Thinkers – LO6 & LO7: Promote children's mathematical problem solving and reasoning skills. Develop students to become competent mathematical thinkers.	• Problem Solving • Articles • Youtube Video: Project-Based Learning in an Actual Classroom And other notes/resources	**Module 5 Assignment** **(25 points)**
M6 – Integrated Learning – LO8 & LO9: Integrating mathematical content with other areas of the curriculum, everyday activities, and financial literacy.	• Mathematics and Other Subjects • Effects of Collaboration in mathematics learning • Link to Elementary ELAR TEKS • Link to Elementary Science TEKS • Link to Elementary Social Studies TEKS • Articles • And other notes/resources	**Module 6 Assignment** **(25 points)**
M7 – Professional Collaboration / Students' Background Knowledge (Families) Include research (prior knowledge, …) – LO10: Collaboration with professionals and families to promote students' mathematical development.	• Co-Teaching: How does it work? • Professional Learning Communities • Bringing Parents/Community into your classroom • Role of Professional Development • Research Based Instructional Strategies • And other notes/resources	**Module 7 Assignment** **(25 points)**

Module Topic	Materials to Read and Review	Assignments
FINAL PROJECT MODULE – VERTICAL ALIGNMENT PLAN **200 points**	Project Instruction in D2L module	**REQUIRED ASSIGNMENT:** • **Create a vertical alignment lesson plan.** • **Submit the assignment in the corresponding Dropbox in D2L.**

Module Topic	Materials to Read and Review	Assignments
Field Module – Field Hours (TK20) and Assignments related to three observations **300 points**	**Instruction Video, Notes, and other resources in the module.**	• Pre-conference – Via zoom or in-person Submit the following BEFORE pre-conference observation: • OBSERVATION LESSON PLAN Include all the documents and links related to the lesson plan in D2L. Teaching • CLASSROOM TEACHING OBSERVATION Video (DUE 11:30 pm on the day of teaching). • TEACHING REFLECTION - DUE 11:30 On the day of teaching. • TECHNOLOGY INTEGRATION Critique (DUE 11:30 the day AFTER teaching). • FINAL LESSON PLAN (you will have opportunity to revise and resubmit the final lesson plan) • Post-conference – Via zoom or in-person • Upload all documentation- feedback form and reflection on TK20 AFTER ALL signatures

Tentative Course Schedule

**Subject to change as per the class and student needs

Module Topic	Due Dates	Assignments
Getting to know the Course	• Week 1	Syllabus Quiz

M1 – Review of Standards	• Due Sept 11th	Module 1 Assignment #1 Module 1 Assignment #2 (25 points each)
M2 – Mathematical Learning Foundations (Young Learners) (Includes Assessment, Using Assignments)	• Due Sept 25th	Module 2 Assignment (25 points)
M3 – Strategies/activities in teaching mathematics to young children – Pre-Field Content Knowledge / Differentiation	• Due Oct 2nd	Module 3 Assignment (25 points)
Field Modules	• Opens AFTER Module 3 is completed • All lesson, observation, reflection, and critique are **due by Nov 28th**	Lesson Plan Teaching Lesson Video Teaching lesson Reflection Technology Critique for the teaching lesson Total 300 points
M4 – Student Engagement & Instructional Resources (Include Learning Environment)	• Due Oct 23rd	Module 4 Assignment (25 points)
M5 – Developing Mathematical Thinkers	• Due Nov 6th	Module 5 Assignment (25 points)
M6 – Integrated Learning	• Due Nov 27th	Module 6 Assignment (25 points)

M7 – Professional Collaboration / Students' Background Knowledge (Families) Include research (prior knowledge, …)	• Due Dec 4th	Module 7 Assignment (25 points)
Final Project	• Opens after all 7 modules have been completed • Due Dec 4th	Comprehensive Vertical Alignment Plan 200 points