



On-Campus Course Syllabus

EDU 315 L1

EC-6 Math Instructional Methods

Fall 2024

Class Information

Day and Time: Thursdays at 4:45 pm – 7:15 pm

Room Number: E 202

Contact Information

Instructor Name: Karen Y. Gosby

Instructor Email: kgosby@criswell.edu

Instructor Phone: 214.796.0965 or 469.300.1567

Instructor Office Hours: [By appointment ONLY](#)

Course Description and Prerequisites

Emphasizes the teaching of mathematics in an EC-6th grade setting. A major goal of this course is to guide students to an understanding of concepts related to numbers and number systems. Students are given opportunities to practice and to demonstrate knowledge of patterns, relations, operations, and computational reasoning. Special emphasis is given to writing lesson plans that incorporate the mathematics Texas Essential Knowledge and Skills (TEKS) with a special emphasis on problem-solving processes. Nine clock hours of field experience are required for this course. (Prerequisite: EDU 301)

Course Objectives

1. Be familiar with the NCTM *Principles and Standards for School Mathematics*, the Texas Essential Knowledge and Skills (TEKS), and apply them to mathematics planning and instruction.
2. Be familiar with the *Professional Standards for Teaching Mathematics* and how they influence teaching methods.
3. Discuss the current influences on and reform movements aimed at mathematics instruction in American schools.
4. Plan lessons that incorporate "Doing" mathematics in the elementary classroom.
5. Teach in a developmentally appropriate way which reflects a constructivist view of learning.
6. Use problem-solving as a principle instructional strategy while designing and selecting effective learning tasks.
7. Use a variety of assessment skills to evaluate student progress in Mathematics.

Required Textbooks

Van de Walle, J., *Elementary and Middle School Mathematics, Teaching Developmentally*: Texas Education, 10th edition, Massachusetts: Pearson, 2019

ISBN-13: 978-0-13-480208-4

ISBN-10: 0-13-408208-X

Course Requirements and Assignments

1. Student Assessment: You will create, score, and interpret a math assessment to a selected child who is 5-12 years in age. The assessment is to be included in your Final Math Course Portfolio.

DUE: 9.19.24 Points: 5 points

2. Display Board: You will design a display board that teaches a math concept covered in your text. It should be appropriate for use in an EC-6th grade class. The design is to be interactive, in some fashion, for the students. It is to be creative, reflective of professionalism, and neat. You will select a week to put up your bulletin board in the classroom and instruct a lesson that incorporates the board.

DUE: 9.26.24 Points: 5 points

3. Game: You will create a math game that teaches a math concept covered in your text. It should be appropriate for use in an EC-6th grade class. The game is to be demonstrated in class during a teaching session. It is to be creative, neat, and reflective of professionalism.

DUE: 10.3.24 Points: 5 points

4. Math Manipulative: You will create a math manipulative that teaches a math concept covered in Chapters 7 to 13 in your text. It should be appropriate for use in an EC-6th grade class. The manipulative is to be demonstrated in class during a teaching session. It is to be creative, neat, and reflective of professionalism.

DUE: 10.31.24 Points: 5 points

5-9. Teaching Experiences: You will prepare and present (5) 50 to 60 minute math lessons, with an emphasis on problem-solving skills. The lessons are to be appropriate for EC-6th grade and emphasize concepts from your text. You are to include either a visual aide or manipulative in your lessons. A selection of high-quality children's literature and a writing activity are to be included as part of your lessons. A typed lesson plan with the **appropriate TEKS** is due at the time of your lesson. **These lessons will be presented in the classroom that you are assigned to when completing your 9 clock hours of field experience.** Record one teaching session to critique yourself and write a reflection. Complete a journal entry for each teaching session.

DUE: October 10, 24, 31; November 7, 14 Points: 5 points each / 25 points total

10. Technology: You will utilize technology in at least one of your teaching session lessons. This may be in the form of charting data, analyzing data, computations, practice programs, etc. **The children must be the ones using the computer.**

DUE: 11.21.24 Points: 5 points

11. Quizzes: You will be assessed on math concepts covered in your text.

DUE: 9.11, 9.25, 11.6, 11.20, 12.12 Points: 5 points each / 25 points total

12. Math Course Portfolio: You will include in this portfolio your 5 Journal Entries from the teaching experiences, the critique of your recorded teaching session, the Student Assessment, and a two-page self-evaluation of yourself as a Math teacher. **You will discuss your learning experiences during the final night of class.**

DUE: 12.5.24 to 12.12.24 Points: 25 points

Failure to complete the entire 9 hours of Field Experience/Teaching Assignment will result in an “F” in this course.

Course/Classroom Policies and Information

Class Attendance

Students are responsible for enrolling in courses for which they (1) anticipate being able to attend every on-campus class session on the day and time appearing on course schedules, or (2) participating in academically related activities as identified in online-course schedules including synchronous class sessions conducted remotely by video, and then making every effort to do so. When unavoidable situations result in absence or tardiness, students are responsible for acquiring any missed information. Professors are not obliged to allow students to make up missed work. Per their independent discretion, individual professors may determine how attendance affects students' ability to meet course learning objectives and whether attendance affects course grades. Professors apprise students of such information in course syllabi.

Students receiving grants, loans, or scholarships must meet specified requirements of various departments at the college and should consult relevant sections of the *Academic Catalog*. To ensure such funds will not be forfeited, students are responsible for contacting the proper departments to ascertain any specific course participation requirements and consequences of not meeting such requirements. Students receiving grants, loans, or scholarships should consult the Financial Aid office.

While Criswell College is a non-attendance taking institution, it nevertheless must demonstrate that students begin their courses in order to comply with Federal Aid regulations. Accordingly, students must participate in academically related activities during census periods. Failure to meet this requirement will result in students being administratively dropped from courses.

Academically related activity is defined as any course-related activity that may be used as evidence of attendance. Examples include:

- physical presence in a classroom during a class session with the instructor present,
- participation in a synchronous remote video class session with the instructor present,
- submission of an academic assignment, quiz, or exam,
- participation in an interactive tutorial or computer-assisted instruction,
- participation in a study group or discussion board that is assigned by the instructor,
- documentation showing that the student and a faculty member corresponded about the academic subject of the course.

NOTE: Logging into a Canvas course alone and logging into a Synchronous Online class session without active participation or with the camera off are not considered attendance.

NOTE: A census period begins on the first day of a semester/term and runs through the end of the last day to drop courses. During the census period, attendance data is collected in order to demonstrate compliance with Federal Aid regulations. There is no census period for winter terms since there is no last day to drop courses.

Campus Closure

To ensure the health and safety of students and employees, college administrators may decide it is necessary on rare occasions to close the campus. Once this decision is announced, instructors will contact students to provide further details regarding the campus closure's impact on those courses. Students are responsible to watch for communication from their instructors and respond appropriately. (Unless otherwise specified by the instructor in this syllabus, this communication will be sent to the student's Criswell College e-mail account.)

In order to make progress toward the courses' objectives, instructors have the freedom during most campus closures to require students to participate in activities as alternatives to meeting on campus. An instructor may, for example, hold class remotely (through Zoom) at the scheduled time, provide a recording of a class or presentation for students to watch independently, or assign other activities that students are to accomplish before returning to campus. Students are responsible for accomplishing these alternative activities as well as any course requirements listed in this syllabus during the period of the campus closure. If, during the period of the campus closure, personal circumstances prohibit a student from accomplishing these alternative activities or course requirements and assignment listed in the syllabus during the campus closure, the student is responsible for communicating with the instructor as soon as possible. Instructors will not penalize students who do not have the means to accomplish the alternative activities during the period of the campus's closure and will work with students whose circumstances during the campus closure prohibited their timely completion of course requirements and assignments in the syllabus.

Grading Scale

A	93-100	4.0 grade points per semester hour
A-	90-92	3.7 grade points per semester hour
B+	87-89	3.3 grade points per semester hour
B	83-86	3.0 grade points per semester hour
B-	80-82	2.7 grade points per semester hour
C+	77-79	2.3 grade points per semester hour
C	73-76	2.0 grade points per semester hour
C-	70-72	1.7 grade points per semester hour
D+	67-69	1.3 grade points per semester hour
D	63-66	1.0 grade point per semester hour
D-	60-62	0.7 grade points per semester hour
F	0-59	0.0 grade points per semester hour

Incomplete Grades

Students requesting a grade of Incomplete (I) must understand that incomplete grades may be given only upon approval of the faculty member involved. An "I" may be assigned only when a student is currently passing a course and in situations involving extended illness, serious injury, death in the family, or employment or government reassignment, not student neglect.

Students are responsible for contacting their instructors prior to the end of the semester, plus filing the appropriate completed and approved academic request form with the Registrar's Office. The "I" must be removed (by completing the remaining course requirements) no later than 60 calendar days after the close of the term or semester in which the grade was awarded, or the "I" will become an "F."

Academic Honesty

Absolute truth is an essential belief and basis of behavior for those who believe in a God who cannot lie and forbids falsehood. Academic honesty is the application of the principle of truth in the classroom setting. Academic honesty includes the basic premise that all work submitted by students must be their own and any ideas derived or copied from elsewhere must be carefully documented.

Academic dishonesty includes, but is not limited to:

- cheating of any kind,
- submitting, without proper approval, work originally prepared by the student for another course,
- plagiarism, which is the submitting of work prepared by someone else as if it were his own, and
- failing to credit sources properly in written work.

Institutional Assessment

Material submitted by students in this course may be used for assessment of the college's academic programs. Since programmatic and institutional assessment is done without reference to specific students, the results of

these assessments have no effect on a student's course grade or academic standing at the college. Before submitting a student's work for this type of assessment, the course instructor redacts the work to remove anything that identifies the student.

Institutional Email Policy

All official college email communications to students enrolled in this course will be sent exclusively to students' institutional email accounts. Students are expected to check their student email accounts regularly and to respond in an appropriate and timely manner to all communications from faculty and administrative departments.

Students are permitted to setup automatic forwarding of emails from their student email accounts to one or more personal email accounts. The student is responsible to setup and maintain email forwarding without assistance from college staff. If a student chooses to use this forwarding option, he/she will continue to be responsible for responding appropriately to all communications from faculty and administrative departments of the college. Criswell College bears no responsibility for the use of emails that have been forwarded from student email accounts to other email accounts.

Disabilities

Criswell College recognizes and supports the standards set forth in Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and similar state laws, which are designed to eliminate discrimination against qualified individuals with disabilities. Criswell College is committed to making reasonable accommodations for qualifying students, faculty, and employees with disabilities as required by applicable laws. For more information, please contact the Student Services Office.

Intellectual Property Rights

Unless otherwise specifically instructed in writing by the instructor, students must neither materially nor digitally reproduce materials from any course offered by Criswell College for or with the significant possibility of distribution.

Research and Writing Standards

The default writing style for written assignments in Criswell College Courses is the latest edition of *A Manual for Writers of Research Papers, Theses and Dissertations* by Kate Turabian. However, instructors are free to require alternative writing styles in their courses. These styles include but are not limited to the American Psychological Association (APA), Chicago Manual of Style, Modern Language Association (MLA), and Society of Biblical Literature (SBL) writing guides.

Resources and Supports

Canvas and SONIS: Criswell College uses Canvas as its web-based learning tool and SONIS for student data. Students needing assistance with Canvas should contact the Canvas Help Support line at (844) 358-6140. Tech support is available at this number, twenty-four hours a day. Students needing help with SONIS should contact the Campus Software Manager at studenttechsupport@criswell.edu.

Student Services: The Student Services Office exists to foster and encourage success in all areas of life—physical, intellectual, spiritual, social, and emotional. Students are encouraged to reach out for assistance by contacting the office at 214.818.1332 or studentservices@criswell.edu. The Student Services Office also works with local counseling centers to ensure that every student has access to helpful mental health resources. More information is located on the college website at [Criswell College Mental Health Resources](#), and students may contact the Director of Student Services if they have any questions.

Wallace Library: Students can access academic resources and obtain research assistance by contacting or visiting the Wallace Library, which is located on campus. For more information, email the Wallace Library at library@criswell.edu. Login credentials are emailed to students near the beginning of the semester.

Tutoring Center: Students are encouraged to consult with tutors to improve and enhance their skills and confidence. Tutors have been recommended by the faculty to ensure that the tutor(s) are qualified to serve the student body. Every tutor brings experience and expertise in an effort to provide the proper resources for the subject matter at hand. To consult with a tutor, students can schedule an appointment through Calendly (<https://calendly.com/criswell-tutoringcenter>) or by visiting the Tutoring Center located on the second floor in room E203. For questions, call 214.818.1373 or email at tutoringcenter@criswell.edu.

Course Outline/Calendar

Date	Topic	Assignments Due
8.22.24	Class Topic: Syllabus Explanation	
	Reading Assignment: Chapter 1 - Teaching Math in the 21st Century; Math Reforms	
8.29.24	Class Topic: Chapter 1 - Teaching Math in the 21 st Century; Math Reforms	
	Reading Assignment: Chapter 2 - Exploring What It Means to Know and Do Mathematics Chapter 3 - Teaching Through Problem Solving	
9.5.24	Class Topic: Chapter 2 - Exploring What It Means to Know and Do Mathematics Chapter 3 - Teaching Through Problem Solving	
	Reading Assignment: Chapter 4 – Planning in the Problem-Based Classroom Chapter 5 – Creating Assessments for Learning	
	Homework: Begin Quiz #1 (Chapters 1-3)	Quiz #1 due 9.11.24 @ 11:59pm

9.12.24	Class Topic: Chapter 4 – Planning in the Problem-Based Classroom Chapter 5 – Creating Assessments for Learning	
	Reading Assignment: Chapter 6 - Teaching Mathematics Equitably to All Children Chapter 7 - Developing Early Number Concepts and Number Sense	
	Homework: Create a Student Assessment	
9.19.24	Class Topic: Chapter 6 - Teaching Mathematics Equitably to All Children Chapter 7 - Developing Early Number Concepts and Number Sense	Student Assessment
	Reading Assignment: Chapter 8 – Developing Meanings for the Operations Chapter 9 – Developing Basic Fact Fluency	
	Homework: Create a Display Board Begin Quiz #2 (Chapters 4-7)	Quiz #2 due 9.25.24 @ 11:59pm
9.26.24	Class Topic: Chapter 8 – Developing Meanings for the Operations Chapter 9 – Developing Basic Fact Fluency	Display Board
	Reading Assignment: Chapter 10 – Developing Whole-Number Place-Value Concepts	
	Homework: Create a Game	
10.3.24	Class Topic: Chapter 10 – Developing Whole-Number Place-Value Concepts	Game
	Reading Assignment: Chapter 11 - Developing Strategies for Addition and Subtraction Computation Chapter 12 – Developing Strategies for Multiplication and Division Computation	
	Homework: Prepare Lesson Plan 1	
10.10.24	Class Topic: Chapter 11 - Developing Strategies for Addition and Subtraction Computation	Lesson Plan 1

	Chapter 12 – Developing Strategies for Multiplication and Division Computation	
	Reading Assignment: Chapter 13 – Algebraic Thinking, Equations, and Functions	
	Homework: Prepare Lesson Plan 2	
10.14-18.24	*** Student Development Week ***	Field Experience Hours
10.24.24	Class Topic: Chapter 13 – Algebraic Thinking, Equations, and Functions	Lesson Plan 2
	Reading Assignment: Chapter 14 – Developing Fraction Concepts Chapter 15 – Developing Fraction Operations	
	Homework: Prepare Lesson Plan 3 Create a Math Manipulative	
10.31.24	Class Topic: Chapter 14 – Developing Fraction Concepts	Lesson Plan 3
	Chapter 15 – Developing Fraction Operations	Math Manipulative
	Reading Assignment: Chapter 16 – Developing Decimal and Percent Concepts and Decimal Computation Chapter 17 – Ratios, Proportions, and Proportional Reasoning	
	Homework: Prepare Lesson Plan 4 Begin Quiz #3 (Chapters 8-13)	Quiz #3 due 11.6.24 @ 11:59pm
11.7.24	Class Topic: Chapter 16 – Developing Decimal and Percent Concepts and Decimal Computation Chapter 17 – Ratios, Proportions, and Proportional Reasoning	Lesson Plan 4
	Reading Assignment: Chapter 18 – Developing Measurement Concepts Chapter 19 – Developing Geometric Thinking and Geometric Concepts	
	Homework: Prepare Lesson Plan 5	

11.14.24	Class Topic: Chapter 18 – Developing Measurement Concepts Chapter 19 – Developing Geometric Thinking and Geometric Concepts	Lesson Plan 5
	Reading Assignment: Chapter 20 – Developing Concepts of Data and Statistics Chapter 21 – Exploring Concepts of Probability Chapter 22 – Developing Concepts of Exponents, Integers, and Real Numbers	
	Homework: Develop Technology Lesson Plan Begin Quiz #4 (Chapters 14-19)	Quiz #4 due 11.20.24 @ 11:59pm
11.21.24	Class Topic: Chapter 20 – Developing Concepts of Data and Statistics Chapter 21 – Exploring Concepts of Probability Chapter 22 – Developing Concepts of Exponents, Integers, and Real Numbers	Technology Lesson
	Homework: Review Math Course Portfolio Begin Quiz #5 (Chapters 20-22)	
11.25-29.24	*** Thanksgiving Holiday Break ***	
12.5.24	Math Course Portfolio Submission	Teaching Critique
		5 Journal Entries
		Student Assessment
		2-page Self-Evaluation
12.12.24	Final Math Course Portfolio Submission	Quiz #5 due 12.12.24 @ 11:59pm