



On-Campus Course Syllabus

EDU 315 L1

EC-6th Math Instructional Methods

Fall 2021

Class Information

Day and Time: Thursday @ 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

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*, 8th edition, Massachusetts: Pearson, 2012

ISBN-13: 978-0-205-57352-3

ISBN-10: 0-205-57352-5

Course Requirements and Assignments

1. Student Assessment: You will administer, score, and interpret a math assessment to a selected child who is 5-12 years in age. These assessments are to be included in your Final Math Lab Notebook.

DUE: 9/9/21 **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: 9/16/21 **Points: 10 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: 9/23/21 **Points: 5 points**

4. Math Manipulative: You will create a math manipulative that teaches a math concept covered in Chapters 9 to 16 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: 10/21/21 **Points: 5 points**

5-9. Teaching Experiences: You will prepare and present a 50 to 60 minute math lesson, with an emphasis on problem-solving skills. The lesson is to be appropriate for EC-6th grade and is to emphasize concepts from your text. You are to include either a visual aide or manipulative in your lesson. A selection of high-quality children's literature and witting your activity are to be included as part of your lesson. 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.**

DUE: 9/30/21 to 11/11/21 Points: 10 points each / 50 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: 11/18/21 Points: 10 points

11. Math Course Portfolio: You will include in this portfolio your 5 journal entries from the teaching experiences, the critique of your filmed 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: 12/9/21 Points: 15 points

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

Class Attendance

Students are responsible for enrolling in courses for which they anticipate being able to attend every class session on the day and time appearing on course schedules, and then making every effort to do so. When unavoidable situations result in absence or tardiness, students are responsible for acquiring any information missed. Instructors are not obliged to allow students to make up missed work. Per their independent discretion, individual instructors may determine how attendance affects students’ ability to meet course learning objectives and whether attendance affects course grades.

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.

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. Pastoral and certified counseling services are also available to Criswell students. Appointments are scheduled through the Dean of Students, at deanofstudents@criswell.edu.

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. Offsite login information is available in Canvas in the “Criswell Student Training Course” under “Library Information.”

Tutoring Center: Students are encouraged to consult with tutors to improve and enhance their skills and confidence in any subject matter taught at the college. 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 visit the Tutoring Center located on the second floor in room E203, or schedule an appointment by emailing tutoringcenter@criswell.edu or by calling 214.818.1373.

Course Outline/Calendar

Date	Topic	Reading Assignment	Assignments Due
8/19/21	Syllabus Explanation		
	Math Reforms	Chapter 1	
8/26/21	What It Means to Do Math	Chapter 2	
	Teaching Through Problem Solving	Chapter 3	
9/2/21	Planning	Chapter 4	
	Assessment	Chapter 5	Quiz 1 – Ch 1-3
9/9/21	Teaching All Children Mathematics	Chapter 6	Student Assessment
	Technology in Mathematics	Chapter 7	
9/16/21	Number Concepts and Number Sense	Chapter 8	Bulletin Board
			Quiz 2 – Ch 4-7
9/23/21	Operations: Addition & Subtraction	Chapter 9	Game

	Operations: Multiplication & Division		
9/30/21	Mastering the Basic Facts	Chapter 10	Lesson Plan 1
10/7/21	Place Value Development	Chapter 11	Lesson Plan 2
	Computation: Addition & Subtraction	Chapter 12	
	Computation: Multiplication & Division	Chapter 12	
10/11-15/21	*** FALL BREAK ***	Field Experience Hours	
	Estimation with Whole Numbers	Chapter 13	
10/21/21	Fraction Concepts	Chapter 15	Lesson Plan 3
	Computation with Fractions	Chapter 16	Math Manipulative
10/28/21	Decimals & Percent Concepts	Chapter 17	Lesson Plan 4
	Proportional Reasoning Concepts	Chapter 18	Quiz 3 – Ch 8-13
11/4/21	Measurement Concepts	Chapter 19	Lesson Plan 5
11/11/21	Geometric Concepts	Chapter 20	Technology Lesson
11/18/21	Data Analysis	Chapter 21	
	Probability	Chapter 22	Quiz 4 – Ch 15-20
11/22-26/21	Thanksgiving Holiday Break		
12/2/21	Algebraic Thinking & Functions	Chapter 14	

	Exponents, Integers and Real Numbers	Chapter 23	Quiz 5 – Ch 21-22
12/9/21	Final Notebook Presentation		Teaching Critique
			5 Journal Entries
			Student Assessment
			2 page Self-Evaluation
			Quiz 6 – Ch 14, 23