



CHIPOLA COLLEGE

COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE:

Teaching Elementary School Math

COURSE NUMBER:

MAE 4310

COURSE DESCRIPTION (with prerequisites):

Theory and Methods for teaching mathematics in the elementary school; contemporary approaches to teaching concepts, number systems, numeration systems, computational algorithms, problem solving, informal geometry, measurement, and other math related topics. This course requires a minimum grade of "C." Ten (10) hours practicum are required for course completion. 3 credit hours. Prerequisite: Current background check (fingerprinting) acceptable to the district in which the field experience will take place is required for this course.

NAME(S) OF INSTRUCTORS:

Dr. Rose Cavin

Office: O109B

Contact: 850.718.2325, cavinr@chipola.edu

EFFECTIVE ACADEMIC YEAR:

2015-2016

REQUIRED TEXTBOOKS AND INSTRUCTIONAL SUPPLIES:**Suggested:**

Teaching Elementary and Middle School Mathematics, John A. Van de Walle, Karen Karp, Jennifer Bay-Williams, 8th ed., Pearson, 2012. ISBN: 9780132612265

Hands-On Standards, Deluxe Editions (PreK – K, 1 - 2, 3 - 4, 5 – 6), ETA Cuisenaire, ETA/Cuisenaire, 2006

GRADING POLICY:

The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

A – 90 – 100

B – 80 – 89

C – 70 – 79

D – 60 – 69

F – 59 or less

The Chipola Catalog provides policies and procedures regarding the grading system. A student's Grade Point Average is derived from the grading system/quality point scale.

ATTENDANCE AND WITHDRAWAL POLICIES:

Chipola College expects regular attendance of all students. Students who are absent from classes for any reason other than official college activities must satisfy the

instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day Handout whether or not an absence is excusable and what affect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. **On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.**

MAKE-UP POLICY:

Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

ACADEMIC HONOR CODE POLICY:

Students are expected to uphold the Academic Honor Code. Chipola College's Honor Code is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

STUDENTS WITH DISABILITIES POLICY:

Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola's goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

LIBRARY AND ON-LINE REFERENCE MATERIALS:

The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books and electronic databases can be accessed by using the *LINCCWeb* icon on the Chipola Library website at www.chipola.edu/library. If you have questions about database usage consult the "How to Use the Chipola Databases" on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

TECHNOLOGY RESOURCES:

The college's learning management system is **Canvas**. Classes become available on Canvas on the first day of the semester. It is the student's responsibility to log onto the Canvas system the first day of class to establish the first day of attendance and to check announcements. All official class communication must be through Canvas. For further information, contact your instructor or the Director of eLearning. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-308-2812 for any issues in accessing or utilizing Canvas. The **Information Technology Center**, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website.

FREE TUTORING RESOURCES:

The Academic Center for Excellence (**ACE**) Lab, located in Building L, offers free tutoring from 8 a.m. to 5 p.m. and is equipped with computer workstations. ACE lab hours are posted each semester at the room entrance and on the website. Additionally, Chipola College has contracted **Smarthinking**, a Pearson Company, for online tutoring services, accessible especially from 5 p.m. to 8 a.m. and weekends. Smarthinking can be accessed through Canvas.

ELECTRONIC DEVICE USAGE STATEMENT:

Classrooms should be free of all unnecessary distractions from the task of learning. Therefore, as a general rule, students should silence and avoid use of all electronic devices (laptops, phones, tablets, etc.) not being used for coursework. Consult first-day handouts for any specific policies related to the use of electronic devices in the classroom, as they may vary depending upon the nature of the course or the guidelines of the instructor. Faculty reserve the right to regulate the use of electronic devices and their accessories in class.

DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:

Students enrolled in MAE 4310 will be required to demonstrate the following:

1. Students will participate in classroom discussions where pertinent mathematics education issues will be addressed.
2. Students will demonstrate and use problem-solving techniques while working in-groups with their peers.
3. Students will solve and explain mathematics problems and exercises to their peers.
4. Students will complete special assignments that address key issues in mathematics education.
5. Students will increase and apply knowledge and skills in the Sunshine State Standards relevant to mathematics.
6. The student will increase and apply knowledge and skills in the uniform core curriculum relevant to this content area: teaching strategies to meet the needs of diverse learning populations, classroom management.

COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR MAE 4310	Nat'l Council of Teachers of Math (NCTM) State-Adopted Standards – Focal Points; Common Core Standards	Florida Competencies and Skills- Professional Education (PE)	Content Standards	Florida Educator Accomplished Practices - FEAP	Assessment Measures
Objective:					
Math as a Process	All Standards				Test 1
Learning Theories and Psychology in Mathematics Ed		P.E.- 7.1, 7.2, 7.4,13.1,13.2			Test 1
Curricular Models	All Standards	P.E.-12.1, 12.2, 12.3,12.4			Test 1
Implementing a Course of Study		P.E. – 8.2, 8.3		10.6	Test 1
Planning for Instruction		P.E.- 8.2, 10.1, 10.2, 10.3		8.1	Task CC10M
Teaching Tools and Strategies		P.E.- 2.1, 2.2, 2.3,2.4,9.1,9.2,9.3	1.2.2, 1.3.2, 1.3.3	1.1, 1.3, 1.4, 1.6	Task CC10M
Teaching Specific Mathematics Content in PreK - K	State-Adopted Standards K Common Core Standards			1.1, 1.3, 1.4, 1.6, 2.1, 2.2, 2.3, 2.5, 3.1, 3.3, 3.4, 3.6, 3.7, 3.9, 3.10, 5.1	Task 2.2.1 Assignment 1 – Task CC10M Test 1
Teaching Specific Mathematics Content in grades 1 - 2	State-Adopted Standards 1- 2 Common core Standards	P.E.- 2.1, 2.2, 4.1,10.1, 10.2, 10.3	1.2.2, 1.3.2, 1.3.3	1.1, 1.3, 1.4, 1.6, 2.1, 2.2, 2.3, 2.5, 3.1, 3.3, 3.4, 3.6, 3.7, 3.9, 3.10, 5.1	Task 2.2.2 Assignment 2- Task CC10M Test 2
Teaching Specific Mathematics Content in grades 3 – 4	State-Adopted Standards Grades 3 and 4 Common Core Standards	P.E.- 2.1, 2.2, 4.1,10.1, 10.2, 10.3	1.2.2, 1.3.2, 1.3.3	1.1, 1.3, 1.4, 1.6, 2.1, 2.2, 2.3, 2.5, 3.1, 3.3, 3.4, 3.6, 3.7, 3.9, 3.10, 5.1	Assignment 3 – Task CC10M Task 2.2.2 Test 3
Teaching Specific Mathematics Content	State-Adopted Standards Grades 5	P.E.- 2.1, 2.2, 4.1,10.1, 10.2,	1.2.2, 1.3.2, 1.3.3	1.1, 1.3, 1.4, 1.6, 2.1, 2.2,	Assignment 4 – Task

in grades 5 – 6	and 6 Common Core Standards	10.3		2.3, 2.5, 3.1, 3.3, 3.4, 3.6, 3.7, 3.9, 3.10, 5.1	CC10M Task 2.2.2 Test 4
Meeting the Needs of All Students		P.E.-5.1, 5.2, 7.1, 14.1,14.2		1.1, 1.3, 1.4, 1.6, 2.1, 2.2, 2.3, 2.5, 3.1, 3.3, 3.4, 3.6, 3.7, 3.9, 3.10, 5.1, 5.4	Task CC10M Task 2.2.1
Using technology in the mathematics classroom		P.E.-2.3, 2.4, 3.1, 3.2, 6.1, 6.2, 11.1, 11.2, 11.3,11.4,11.5		1.1, 1.3, 1.4, 1.6, 6.5	Task CC10M

****Assessment Codes**

T = Tests Pre/Post = Pre- and Post-Tests OT = Objective Tests UT = Unit Tests Q = Quizzes F = Final Examination CF = Cumulative Final EX = Departmental Exam SE = Nat'l or State Standardized Exam	RPT = Report/Presentation SP = Skills Performance SD = Skills Demonstration W = Writing Assignments E = Essays DE = Documented Essays RP = Research papers J = Jury R = Recital	Proj. = Projects Exp. = Experiments Cap. Proj. = Capstone Project Cap. Course = Capstone Course Prac. = Practicum Intern. = Internship H = Homework PS = Problem Solving DB = Discussion Board	BO = Behavioral Observation Clin. = Clinicals CS = Case Study CP = Case Plan Port. = Portfolio Obs. = Teacher Observation Sk. Check = Skills Check-off Curriculum Frameworks JP = Judged Performance/Exhibition
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MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

Methods of instruction: Lecture, Class discussions and/or interactions, Large and/or small group projects, activities, discussions, etc., Read and report on professional education and subject matter articles, research, and other materials, Oral presentations, Clinical experiences and reflective papers, field journals, and discussions about them, Portfolios, Videotaping of student teaching a lesson with feedback from instructor and students.

ASSIGNMENT AND/OR COURSE OUTLINE

Students will be required to complete the following:

1. Tasks

1. **Task CC10M (FEAP 10.08, 10.16, 11.04):** The student will compile a portfolio that contains lesson plans (written in the Chipola lesson plan format) that utilize community resources such as parks, labs, industries; children’s literature; manipulatives and/or technology to provide age appropriate mathematics instruction to students in grades PREK – K, 1-2, 3-4, and 5– 6.

1. **Task 2.2.1 (2.1, 2.2, 2.3, 2.5, 3.1, 3.3, 3.4, 3.6, 3.7, 3.9, 3.10, 5.1) -** The teacher candidate has three 15-30-minute lessons videotaped or observed by an instructor, evaluates his/her performance, and obtains an external evaluation from a peer or the mentor on each lesson. The product is the set of three self-

assessments (one of which must be typed), three peer/mentor assessments and the teacher candidate's summary of what he/she has learned.

3. **Task 5.4.2 (2.3, 2.4, 2.5, 2.6, 2.8, 2.9, 3.8)** - The teacher plans a lesson for a class containing diverse students. The teacher is observed to determine effectiveness of instruction with a diverse student population. This observation targets sensitivity, equitable treatment, and planning for students from different backgrounds, cultures, and skill levels.
4. **Task CC8M (FEAP 5.4):** The candidate completes a series of performance tasks that require specific content knowledge in the areas of algebra, geometry, measurement, data analysis and spatial reasoning. *If the student has passed the subject area exam for his/her major, then this task has been demonstrated. For this exemption, the passing score must be recorded in the electronic database by end of the first week of classes.*

The average of these tasks will account for 62% of the final grade*

**Tasks must meet the criteria for "demonstrated" as determined by the scoring rubric to earn credit for this course. Tasks are due at the beginning of class. Tasks are considered "LATE" after the moment the instructor takes them up. Any task received late will result in a grade of 10 point deduction PER DAY. THIS WILL ONLY BE VALID FOR A 48 HOUR PERIOD. AFTER THOSE 48 HOURS THE GRADE WILL GO TO A ZERO. A task judged as "partially demonstrated" or "not demonstrated" must be resubmitted for the purpose of demonstrating the accomplished practice indicators (YOUR GRADE WILL NOT CHANGE).*

The original grade will be used when calculating the course average. Points **will not** be added for resubmissions but will be deducted if not resubmitted within the timeframe set forth by the instructor. **To pass this class ALL tasks must be successfully demonstrated with "acceptable."**

Test 1 (on history of Mathematics Education and K CC) - - - 7 %

Test on teaching grades 1 – 2 – 7 %

Test on teaching grades 3 – 4 – 7 %

Test on teaching grades 5 – 6 – 7%

Tasks – 62%*

Participation and attendance – 10%

Course outline matches the topics listed in the Course Level Student Learning Outcomes Matrix

See your Instructor First Day Handout for individual instructor assignment schedule.