



CHIPOLA COLLEGE

COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE:

Teaching Methods in Middle School Mathematics

COURSE NUMBER:

MAE 3320

COURSE DESCRIPTION (with prerequisites):

This course is designed for students who are majoring in mathematics education and who will be obtaining teacher certification in grades 5-9 or 6-12. In this course students learn principles of effective curriculum design and assessment and apply these principles by designing and developing interactive mathematics curriculum projects for middle school students. This course is offered concurrently with MAE 3940, a one credit hour practicum in which students present their projects in middle school classroom environments. This course addresses specific state-adopted standards, subject matter competencies, pedagogy pertinent to the discipline and required for certification. 10 hours of teaching are required. Corequisite: MAE 3940 or consent of the Education Department. 3 semester hours credit.

NAME(S) OF INSTRUCTORS:

TBD

EFFECTIVE ACADEMIC YEAR:

2022-2023

REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:

Reading material will be provided by the instructor.

Appropriate dress for field experience: black slacks and School of Education polo (Polos are available in the campus bookstore.)

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, and all instructors record attendance daily. 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.

NOTICE OF EQUAL ACCESS/EQUAL OPPORTUNITY AND NONDISCRIMINATION:

Chipola College does not discriminate against any persons, employees, students, applicants or others affiliated with the college with regard to race, color, religion, ethnicity, national origin, age, veteran's status, disability, gender, genetic information, marital status, pregnancy or any other protected class under applicable federal and state laws, in any college program, activity or employment.

Wendy Phippen, Associate Vice President of Human Resources, Equity Officer and Title IX Coordinator, 3094 Indian Circle, Marianna, FL 32446, Building A, Room 183C, 850-718-2269, phippenw@chipola.edu.

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 **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:

- E – 1 Demonstrate understanding of instructional design and lesson planning by applying concepts from human development and learning theories.
- E – 2 Demonstrate ability to maintain a student-centered learning environment that is safe, organized, equitable, flexible, inclusive and collaborative.
- E – 3 Demonstrate effective instructional delivery and facilitation by utilizing deep and comprehensive knowledge of core content.
- E – 4 Demonstrate understanding of assessment by analyzing and applying data from multiple assessments to diagnose learning needs and inform instruction.

- E – 5 Demonstrate continuous improvement by designing purposeful goals to strengthen instructional effectiveness and impact student learning.
- E – 6 Demonstrates professional responsibility and ethical conduct and fulfills expected obligations to students, the public, and the education profession.

LINKING COURSE-LEVEL STUDENT LEARNING OUTCOMES WITH DISCIPLINE-SPECIFIC COMPETENCIES, ASSESSMENT METHODS, AND ARTIFACTS					
STUDENT LEARNING OUTCOMES FOR MAE 3320 The student will:	State Approved Standards	FEAPs (Discipline Outcomes)	FL Competencies and Skills:		Assessment Activities
			Mathematics 5 - 9	Prof Ed	
Examine the issues related to middle years education by comparing the organizational structures of middle schools, junior high schools and various of the middle school models.		E-1		1.9, 2.1	T & Q
Study the intellectual, physical, socio-emotional, moral, and aesthetic development of pre- and early adolescents.		E-1			T & Q
Understand the use of State Approved Standards in teaching mathematics.	All Standards	E-1, E-2, E-3, E-5		1.6	4.4.1-RU 2.2.1-RU T & Q
Demonstrate proficiency in middle grades mathematics and connectivity of individual skills.	All Standards	E-1, E-2, E-3, E-5	All competencies		CC8M-RU 2.2.1-RU T & Q
Build a repertoire of effective teaching strategies, which address learning styles and developmental levels of the middle school student.		E-1, E-2, E-3, E-5		2	4.4.1-RU 5.4.2-RU 2.2.1-RU
Effectively use technology and manipulatives to teach content.		E-1, E-6		3.7	4.4.1-RU Teaching assignment
Create a repertoire of strategies to promote critical thinking, creative thinking, and problem solving.		E-1, E-5		1.2	4.4.1-RU

Plan and critique grade/age appropriate mathematics lessons in each content area.	All Standards	E-1, E-2, E-3	All	3	4.4.1-RU 5.4.2-RU
Participate in professional growth opportunities.		E-5		5.5	CC3B-RU 2.2.1-RU
Evaluate student progress in mathematics by effective use of questioning, observation, and appropriate test construction.		E-2, E-3, E-5		4.2,4.3,4.4	2.2.1-RU

****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:

1. Attend and participate in class regularly.
2. Read all assigned material before class.
3. Study in-class notes and on-line materials.
4. Complete assigned projects in a timely manner to enable reflections and revisions on the final product.
5. Seek opportunities to practice teaching skills through tutoring and substituting in K – 12 schools.
6. Collaborate with peers and other professionals.

ASSIGNMENT AND/OR COURSE OUTLINE

Students MUST wear black slacks and a School of Education polo to all PK-12 campuses. The shirts are available at the campus bookstore for student purchase.

One hour per week the student will meet with the instructor and other practicum students to share experiences and prepare for upcoming assignments.

MAE 3320 Tasks:

1. **Task 4.4.1:** This is a critical task in which the teacher candidate collects strategies to promote critical/creative thinking and problem solving. Each strategy in the collection is described in a narrative and then incorporated into a lesson plan that is aligned with state-adopted standards at the appropriate level of rigor for grades five through nine. The lesson plans must be fully developed

to provide learning experiences that require students to demonstrate a variety of applicable skills and competencies and lead to mastery of the standard(s). The product is the file of annotated strategies and lesson plans.

2. **Task 5.4.2:** The teacher plans, teaches and is evaluated three times by an instructor in a diverse classroom. The teacher must differentiate instruction based on an assessment of student learning needs and recognition of individual differences in students. The product is the lesson plans, and the completed observation instruments.
3. **Task CC3B** The teacher candidate works cooperatively with the Mathematics Education Facilitator to select six sessions at a content related conference or, if unable to attend the conference, to select six articles from juried journals. The teacher candidate will submit a summary on three of the six to include strategies for implementation of the knowledge and skills learned for each of the sessions or from each of the articles in the teaching and learning process and any modifications to the ideas/strategies that would increase its impact in the teaching and learning process.
4. **Task CC8M** 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 completed. For this exemption, a copy of a passing score must be recorded in the database by end of the first week of classes.*
5. **Task 2.2.1-** The teacher candidate teaches three lessons in a 5-9 or 6-12 mathematics classroom. These three lessons are videotaped, observed and assessed by a mentor. The candidate evaluates his/her performance and engages in targeted, professional growth opportunities and reflective practices. The product is the set of three lesson plans, three self-assessments, three mentor assessments and a summary with at least one professional goal to strengthen the teacher candidate's effectiveness in such areas as beginning class on time, having class materials prepared, bringing timely closure to the lesson, focusing attention on all areas of the room through sight and/or movement, and using instructional space effectively.

Course Evaluation Criteria:

- Tasks (60%)
- Participation, Exams, and Other Assignments (40 %)

All tasks must meet the criteria for “demonstrated” as determined by the scoring rubric to earn credit for this course.

All Tasks and Assignments are due at the beginning of class on the due date unless otherwise specified by the instructor. Work not submitted at the time the instructor

collects it will be considered late and will receive a zero (0) for the grade. Late tasks may be submitted within one calendar week of the due date for Demonstration purposes only, but the zero (0) grade will remain.

A task judged as “not demonstrated” must be resubmitted for the purpose of demonstrating the FEAP indicators. Resubmissions must be received by the beginning of class on the due date indicated by the instructor on the rubric when it is returned to the student. Although the original grade is final and no points are added for resubmissions, failure to resubmit by the deadline will result in a ten-point penalty PER DAY grade reduction.

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