



Savannah State University
New Programs and Curriculum Committee
Summary Page – Form I

1. **Submitting College:** SOTE

2. **Department(s) Generating The Proposal:** Choose an item.
 Choose an item. (if needed)

3. **Proposal Title:** Teaching in Mathematics

4. **Course Number(s):** MAED 4416

5. **Course Title(s):** Teaching in Mathematics

6. **Effective State Date:** Spring **Year:** 2014

7. **Brief Summary of Proposal:** This course is an examination and application of curricular issues, learning theories, teaching strategies, instructional materials, and assessment procedures for teaching secondary school mathematics in the multicultural and diverse classroom of today. The course also includes a secondary school field experience in mathematics teaching and seminars. The course emphasizes those practices suggested by research in mathematics education and encouraged by the NCTM. There will be a 60 hour field component to this course.

8. **Type of Proposal:** New Course If other, please describe: Click here to enter text.

9. **Impact on Library Holdings**

Existing: Click here to enter text.
 Additional: Click here to enter text.
 Deletions: Click here to enter text.

10. **Impact on Existing Programs:** None. This course is designed to meet GaPSC Rules for Teacher Preparation and more specifically the biology methods requirements of teacher education candidates. The specific rules satisfied by this course are 505-3-.01 REQUIREMENTS AND STANDARDS FOR APPROVING PROFESSIONAL EDUCATION UNITS AND EDUCATOR PREPARATION PROGRAMS and 505-2-.16 CERTIFICATION BY STATE-APPROVED PROGRAMS.

11. **Additional Resources Required**

Personnel: Full time
 Non-personnel: Click here to enter text.

12. **Approvals:**

- Department Curriculum Committee	Signature _____	Date _____
- Department Chair	Signature _____	Date _____
- College Curriculum Committee	Signature 	Date 9/23/13
- College Dean	Signature 	Date 9/23/13



Savannah State University
New Programs and Curriculum Committee
Course Addition Page – Form II

1. **Course Number:** MAED 4416
2. **Course Title:** Teaching in Mathematics
3. **Catalogue Description:** This course is an examination and application of curricular issues, learning theories, teaching strategies, instructional materials, and assessment procedures for teaching secondary school biology in the multicultural and diverse classroom of today. The course also includes a secondary school field experience in mathematics teaching and seminars. The course emphasizes those practices suggested by research in mathematics education and encouraged by the NCTM. **There will be a 60 hour field component to this course.**
4. **Rationale:** This course builds on and extends the knowledge of theories and curricular issues learned in prerequisite courses in the School of Teacher Education. It is designed to aid students in emerging a comprehensive understanding of the pedagogical knowledge needed in selecting, developing, implementing, evaluating and refining reform-based science instruction for middle and secondary students.
5. **Credit Hours:** 3 credit hours
6. **Pre-requisites:** Admittance to School of Teacher Education, EDUC 3030 and 3200
7. **Syllabus:** See attached
8. **Similarity to or duplication of Existing Courses:** N/A
9. **Textbook selection:** Bremigan, E.G., Bremigan, R.J. & Lorch, J.D. (2011). **Mathematics for Secondary school Teahers: District of Columbia: Maa Textbooks.**
10. **Grading:** Grading Scale: a (90-100); B (80-89); C (70-79); D (60-69); F (below 60)

MAED 4416: Teaching in Mathematics
2014 Fall Syllabus
Savannah State University
School of Teacher Education

Instructor Information

Name:

Rank:

Campus Address:

Office Number:

Email:

Office Hours:

Instructor's Education:

(See instructor's biography under the faculty menu of Desire2 Learn (D2L) ELearning Course Management System)

Catalog Course Description: This course is an examination and application of curricular issues, learning theories, teaching strategies, instructional materials, and assessment procedures for teaching secondary school mathematics in the multicultural and diverse classroom of today. The course also includes a secondary school field experience in mathematics teaching and seminars. The course emphasizes those practices suggested by research in mathematics education and encouraged by the NCTM. Proof of professional liability insurance and a clear background check is required. **There will be a 60 hour field component to this course. You cannot pass this course without it. Verification of professional liability insurance and a clear criminal background check is required prior to placement in the field experience. You will be unable to select a school for placement until this step is completed.**

Pre-requisites: Admittance to School of Teacher Education,
EDUC 3030 and 3200

OBJECTIVES AND OUTCOMES:

As a result of completing this course, the teacher education candidate will be able to:

1. Demonstrate knowledge of how learners develop and reason.
2. Understand and characterize mathematics content accurately.
3. Create learning environments that are active, effective and properly managed.
4. Demonstrate comprehensive, in-depth and contemporary knowledge of mathematics content.
5. Create and implement instruction that exemplifies various cultures and provides all students fair access to a high quality education in a diverse curriculum.
6. Connect content learned from the mathematics curriculum to other disciplines and apply it to global life experiences.
7. Reflect and identify ways to improve the teacher candidates' professional performance.
8. Display behavior that embodies professional and ethical standards in education.
9. Demonstrates effective oral and writing communication.
10. Design effective instruction integrating the use of technology.

REQUIRED TEXT: Bremigan, E. G., Bremigan, R. J., & Lorch, J. D. (2011). Mathematics for Secondary School Teachers: District of Columbia: Maa Textbooks

METHODS OF INSTRUCTION: The basic class format will be discussion derived from the backgrounds, special interest, outside reading, and preparation for class. The quality of the class experience will depend largely on thoroughness of preparation, freedom of expression, and participation of individual class members. In addition, classroom teaching specific assignments, online Desire2Learn (D2L) discussions, web seminars, and field trips maybe scheduled to learn about the variety of teaching strategies in science education. D2L will be used as a web-assisted tool to further enhance the teaching and learning environment.

Post completed assignments, reflections, and other artifacts related to this course in your e-portfolio in TaskStream. Remember, completed assignments will be assessed through your e-portfolio in TaskStream. The e-portfolio is required for all education courses.

GENERAL COURSE REQUIREMENTS:

Each Student in the course is expected to meet the following requirements:

Curriculum Resources Evaluation

You will be assigned to a collaborative team. As a member of the group you will locate and evaluate instructional resources for an assigned portion of the (grade 8) Mathematics curriculum. Findings for each group will be summarized and presented to the class.

Lesson Planning

Creating lessons plans is an essential component in the teaching field. Each student will learn the instructional design process by first concentrating on the development and critique of an individual lesson. Thus, you will be directed through the development process for four lesson plans, some of which you will teach in the middle school prior to development of a lesson sequence or “unit” of instruction. All written lesson plans include measurable objectives, safety guidelines, summarized teacher and student activity, anticipated timing, required materials, and means of assessment summarized. Your initial practice with lesson planning will help you relate the Georgia Professional Standards curriculum to NCTM standards relating to algebra, functions, modeling, geometry and statistics and probability.

Written Reflections

Written assignments are intended to promote reflective analysis in support of learning to teach. These will be periodically assigned throughout the semester. Four of the reflections will be assessed in relation to specific learning outcomes and assignment criteria.

Comprehensive Content Examination

A summative assessment of your content knowledge for teaching high school mathematics will be administered through a traditional exam (multiple choice, true and false, short answer, and essay.) The design of this exam will be based on the Georgia Professional Standards for high school mathematics.

Reflective Narrative

Organize evidence and post your narrative comments regarding your proficiencies for Subject Matter Expertise, Facilitator of Learning, and Collaborative Professional. This will include selected work that you've completed in this course (specified above) as well as work completed earlier in the program. Though final revisions of the reflective narrative will be completed toward the end of student teaching, your final task for this course is to write a self-assessment of your competency for your proficiencies, and set some professional growth goals for student teaching.

Field Experience

The 60 hour field experience is a required component of MAED 4416. It is intended to be one of two practice opportunities prior to student teaching. Teacher candidates will be expected to teach a variety of lessons during this time. In order to be successful in the field experience, the teacher candidate must demonstrate indicators of effective application of instructional strategies and classroom management. The field experience will be assessed using appropriate instruments completed by the teacher candidate, collaborating teacher, and University Supervisor/Field and Clinical Experience Coordinator. A rubric for observations for your field experience will be utilized by your supervising professor and collaborating teacher. You must complete the field experience component of this course in order to receive a passing grade. A teacher candidate may be removed from his/her field experience placement at any time under the recommendation of the collaborating teacher, principal, or university supervisor/Field and Clinical Experience Coordinator. SSU teacher candidates are expected to abide by the student code of conduct and Georgia Code of Ethics while representing the institution off campus. If you do not complete the 60 hour field experience you will automatically receive an "F" in the class.

CLASSROOM NORMS: During the first week of class, class members will establish norms (ground rules), a list of behaviors that the group agrees upon so that everyone can be comfortable in an educational setting that fosters learning. This is a model for setting ground rules in the teacher candidates' own classrooms someday, and is therefore doubly important to follow.

PROFESSIONALISM: It is expected that teacher candidates will conduct themselves with the professionalism that is required of practicing teachers. Such professionalism includes effective and respectful collaboration and communication with colleagues, prompt attendance of all meetings and classes, moral behavior and actions, appropriate

communication and sharing of materials and plans with the collaboration teacher and university supervisor/field and clinical experience coordinator, appropriate professional dress (even on “causal days”), etc. If, at any time, a student’s actions or attitudes are judged to lack professionalism by a collaborating teacher or principal, the necessary actions will be administered.

CLASS PARTICIPATION

Three vital parts of the teaching profession are: 1) Regular and prompt attendance 2) being prepared and 3) being a team player. As such, attendance along with active class participation is important to your overall your grade.

Being a team player is very important as a teacher; therefore you will be placed in groups at various points throughout the semester and will be expected to participate and be prepared to contribute.

Schedule of Activities

Week One	Orientation/Expectations/ Library Resources and TaskStream (overview)
Week Two	Chapter One Functions
Week Three	Chapter Two Lines in the Plane
Week Four	Chapter Three Quadratic Polynomials Classroom Management Safety Plan due
Week Five	Chapter Four Trigonometry Lesson Plan
Week Six	Chapter Five: Hyperbolic Trigonometry Curriculum Resources Evaluation Due
Week Seven	Chapter Six: Numbers Lesson Plan
Week Eight	Chapter Seven: Operations in Number Systems
Week Nine	Chapter Eight: Topics in Number Systems Lesson Plan
Week Ten	Chapter Nine: Exponentiation
Week Eleven	Chapter Ten: Exponential and Logarithmic Functions: History, Computation, and Application Lesson Plan
Week Twelve	Chapter Eleven: Transcendental Functions and Complex Numbers Group Presentation (2)

Week Thirteen	Chapter Twelve: Beyond Quadratics: Higher Degree Polynomials Reflective Narrative
Week Fourteen	Chapter Thirteen Measurement Field Experience Wrap-Up Comprehensive Content Examination
Week Fifteen	Course Final Review

I reserve the right to change topics of discussion and “other” assignments in class without advanced notice. Students are expected to follow the University’s code of conduct regarding all assignments (both in and out of class).

GRADING:

Grades will be computed as follows:

Curriculum Resources Evaluation: 15%
Lesson Planning: 40%
Written Reflections: 20%
Reflective Narrative: 10%
Comprehensive Content Examination: 15%
TOTAL 100%

The grading scale below will be used to determine your final grade.

AVERAGE GRADE

90 -100 A
80 -89 B
70 -79 C
60 -69 D
BELOW 60 F

ABSENCE/WITHDRAWAL POLICY:

You are encouraged and expected to attend all classes. Roll will be taken at the beginning of each class. Missed classes count as absences beginning the first day you are enrolled in the class. **YOU ARE RESPONSIBLE FOR ALL MATERIAL COVERED, EVEN IF YOU ARE ABSENT.** You will receive a grade of zero (0) for class participation on the days you are absent. These points cannot be made up. Please do not contact the School of Teacher Education to report an absence prior to class or to leave a message for me there. Any messages for me should either be emailed to me or left on phone number listed on this syllabus. There are three excused/unexcused absences.

If a student does not attend at least one class during the first two weeks, they may be automatically dropped from the class. I am unable to withdraw you during the semester. If you need to do this before the midpoint of the semester, it is up to you to take care of this with the registrar's office.

TARDY ARRIVAL/EARLY DEPARTURE POLICY:

You are expected to arrive on time for each class and to remain until class is dismissed. Late arrivals (and early departures) disrupt the class and distract me. If you find it impossible to make it to class on time, you should drop the course as soon as possible.

SAVANNAH STATE UNIVERSITY POLICIES**a. ACADEMIC HONESTY POLICY:**

Cheating is against school policy. Cheating includes any attempt to defraud, deceive, or mislead the instructor in arriving at an honest grade assessment, and may include copying answers from other students or using unauthorized notes during tests. Plagiarism is a particular form of cheating that involves presenting as one's own the ideas or work of another, and may include using other people's ideas without proper attribution and submitting another person's work as one's own.

Violations of the cheating policy will result in a grade of '0' for the assignment in question, and may result in a failing grade for the course at the instructor's discretion. See the Student Conduct Code in the Student Handbook for details and for a review of the appeals procedure. Additional information related to Academic Honesty as it applies to courses taken in the School of Teacher Education may be found on the website at http://www.savannahstate.edu/student-affairs/docs/SSU_Student_Handbook.pdf

b. AMERICANS WITH DISABILITIES ACT STATEMENT

If you are a student who is disabled as defined under the Americans with Disabilities Act and require assistance or support services, please seek assistance through the Center for Disability Services. A CDS Counselor will coordinate those services. It is the student's responsibility to notify the instructor and to obtain an accommodation letter so that accommodations can be made for the class.

c. STATEMENT OF NON-DISCRIMINATION

Savannah State University supports the Civil Rights Act of 1964, Executive Order #11246, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act. No person shall, on the basis of age, race, religion, color, gender, national origin or disability, be excluded from participation in, or be denied the benefits of, or be subjected to discrimination under any program or activity of the college.

Any individual with a grievance related to the enforcement of any of the above provisions should contact the Assistant Director of Human Resources, Ombudsperson.

d. AFFIRMATIVE ACTION STATEMENT

Savannah State University is an equal opportunity employer which assures that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability, be excluded from employment or participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity the institution conducts. Savannah State University complies with all state and federal affirmative action guidelines and criteria in its employment and hiring procedures and practices.

e. EQUAL OPPORTUNITY STATEMENT

Savannah State University is an equal employment opportunity institution. The institution's policy is that all recruiting, hiring, and promotion in all categories will be accomplished without regard to race, creed, color, national origin, sex, sexual orientation, handicap, or age. All personnel policies and employees benefits will be administered in a nondiscriminatory manner. As a part of this policy, an equal employment opportunity/affirmative action office is maintained on campus.

SYLLABUS ACKNOWLEDGEMENT FORM

- I have received a copy of the MAED 4416 course syllabus in person.
- I have read and understand the content.

Name _____
(Please print)

Signature _____

Date _____

(You must submit this form to the instructor after the first week of class.)