

COURSE SYLLABUS
MA 425, Methods & Materials for
Teaching Secondary Mathematics



I. INSTRUCTOR INFORMATION

- A. Name: Dr. Jessica Stovall
- B. Office: MAB 102
- C. Office Phone Number: 256-765-4762
- D. E-mail Address: jstovall@una.edu
- E. Office Hours:
 - MW: 9:00 – 11:00
 - TR: 9:00 – 9:30
 - F: 10:30 – 11:00
 - Also by Appointment

II. COURSE INFORMATION

- A. Methods & Materials for Teaching Secondary Mathematics, MA 425,
3 Semester Hours
- B. Fall 2015, Section 01
- C. MWF 11:00 – 11:50, MAB 5
- D. Prerequisites: Credit or Concurrent Enrollment in MA 421, ABI/FBI background clearance
- E. Course Description: Practical aspects of teaching and learning mathematics at the secondary level. Topics covered include secondary mathematics curricula, preparation and presentation of lesson material, classroom management, and professional behaviors.
- F. Course Objectives:
 - 1. Classroom management: Students will explore ideas concerning how to maintain control and how to maintain a positive attitude towards one's students.
 - 2. Professional behaviors: Students will become aware of mathematics professional organizations. They should develop an appreciation for the need for professional development and become aware of resources that are available to enhance their personal knowledge of mathematics.

3. Mathematical Problem Solving: Students will demonstrate knowledge of various problem-solving strategies, including reading the problem, interpreting the problem, writing/ using appropriate mathematical models, solving the problem, and reflecting on the reasonableness of the answer; working problems backwards; and estimating, making predictions, and checking. 290-3-3.13(2)(a)

4. Mathematical communication: Prior to program completion, prospective teachers of mathematics shall demonstrate the ability to: Accurately communicate, orally and in writing, with students about mathematical concepts, and symbols. Analyze and evaluate the mathematical processes and strategies used by students. 290-3-3.13(2)(c)

5. Technology: Prior to program completion, prospective teachers of mathematics shall demonstrate the ability to: Select and use appropriate technological tools and software, including but not limited to dynamic graphing tools, computer algebra systems, statistical packages, data-collection devices, spreadsheets, and online resources. Use technology to enhance the teaching of mathematics and to promote student's understanding of Mathematical concepts. 290-3-3-.13(2)(f)

6. Mathematics pedagogy. Prior to program completion, prospective teachers of mathematics shall demonstrate:

Knowledge of:

A wide variety of available mathematics curricula and teaching materials for all students including those with special needs such as the gifted, challenged, and speakers of other languages. Developmentally appropriate and research-based strategies for teaching mathematics, including Inquiry-and application-based instruction as advocated by the Alabama Math, Science, and Technology Initiative (AMSTI). Professional mathematics organizations and their available print, online, and other resources.

Instructional strategies to raise student achievement for specific populations. 290-3-3-.13(2)(g)1

Ability to:

Plan lessons, units, and course that address appropriate learning goals, including those that address Local, state, and national mathematics standards and legislative mandates. Use different types of instructional strategies in planning mathematics lessons. Lead classes in mathematical problem solving and developing in-depth conceptual understanding, and to help students develop and test generalizations. Use a variety of manipulative and visual materials to help students explore and develop mathematical concepts. Aid students in acquiring mathematical vocabulary and concepts in context through problem-solving experiences. 290-3-3-.13(2)(g)(2).

7. Mathematics Content : Prior to program completion, prospective teachers of mathematics must demonstrate knowledge of:

The secondary mathematics content as mandated in the Alabama Course of Study: Mathematics.

The U.S. Department of Education's National Mathematics Advisory Panel's Final Report (2008) from the U.S. Department of Education and its benchmarks addressing the Critical Foundations of Algebra.

The historical development of mathematics, including contributions from diverse cultures. 290-3-3.13(2)(h)

Knowledge of the content standards and of the scope and sequence of the subject areas of one's teaching field(s) as defined in the Alabama Course of Study for those teaching fields. 290-3-3.03.(1)(c)2. Assessment using test and reading summary.

III. TEXTBOOK AND SOFTWARE

A. Textbook: None

B. Software: None

C. Calculator Policy: None

IV. ATTENDANCE POLICY

Daily attendance is expected in this class and is necessary to learn the material. Attendance will be taken every day. You must be on time and stay the entire class in order to get credit for the day's attendance. If you exceed 6 unexcused absences, no credit may be earned for the course. You will either need to withdraw from the course or you will receive an F for your course grade. To receive an excused absence you must notify me as soon as possible and bring documentation the day you return.

V. FINAL EXAM

You will be taking a COMPREHENSIVE Final Exam worth 200 points. The exam is scheduled for Tuesday, December 8, 2015 from 10:15am – 12:00noon. Make necessary arrangements now to attend as NO exceptions will be made.

VI. GRADING SCALE

There are 1050 points available for this course; they are distributed as described below. General guidelines for letter grades are as follows:

A: 945 – 1050	(90% – 100%)
B: 840 – 944	(80% - 89%)
C: 735 – 839	(70% - 79%)
D: 630 – 734	(60% - 69%)
F: 629 and below	(59% and below)

VII. GRADING PLAN

GRADE DISTRIBUTION: Grades are determined based on points as follows:

1. Midterm Exam	100 points
2. Final Exam	200 points
3. Reaction Papers	100 points
4. Reflection Papers and Written Assignments	300 points
5. Presentations	300 points
5. Attendance and Participation	<u>50 points</u>
TOTAL:	1050 points

REACTION PAPERS (100 points):

Field experience should be completed in five 3-hour increments. Insofar as possible, this experience should include active participation in class learning activities as assigned by the classroom teacher. It is the individual student's responsibility to make arrangements with the teacher and principal for these observation hours to be completed. Hours may be completed in different schools and different classrooms. Field Experience forms must be completed, including signatures of classroom teachers, in order to properly document your field experience. A reaction paper will be written for each of these five field experiences. Each paper is worth 20 points.

REFLECTION PAPERS AND WRITTEN ASSIGNMENTS (300 points):

Throughout the semester you will be given written assignments that will help strengthen your skills and understanding of the material. Most of these assignments will be completed out of class and will be due at the beginning of class. There will be no make ups if an activity is missed, and late work will not be accepted. Assignments will be weighted equally, unless otherwise notified.

PRESENTATIONS (300 points):

Throughout the semester you will be required to make several presentations, including presenting at least one mathematics classroom lesson plan. Assignments will be weighted equally, unless otherwise notified.

ATTENDANCE AND PARTICIPATION (50 points):

Attendance and Participation in the course are worth 50 points. To earn these points, you need to come to class on time, be prepared, work problems as instructed, and participate in classroom discussions. You will be allowed 3 unexcused absences without penalty. Each additional unexcused absence after that will remove 5 points.

VIII. GENERAL COMMENTS BY INSTRUCTOR**CLASS ETIQUETTE:**

Class will begin and end on time, as determined by my watch.

It is requested that cell phones be turned off or turned on silent during class time. If a problem develops with cell phones going off in class, I will institute a grade deduction.

During exams, there will be a designated place for all belongings...do not bring anything to an exam that you are uncomfortable placing away from your desk. No cell phones will be allowed in sight during exams.

Sleeping in class will not be tolerated. Reading newspapers, books, headphones, and so on are similarly forbidden. Personal conversations should take place outside of class time.

Disregard of any of these policies may result in your removal from the course.

OFFICE ETIQUETTE:

“Office Hours” mean that I will be in my office, and you are welcome to walk in for help.

“Appointment” means “previously-arranged and mutually-convenient meeting time.”

You can always try your luck, and stop by my office to see if I am available, but keep in mind that I often have other responsibilities.

Please come prepared to office hours. Try to formulate specific questions to ask, or show me where you got stuck in solving a problem. It will make our time together more effective!

EMAIL ETIQUETTE:

Please include your name and class time with your emails.

Be very specific with your questions. Tell me where you are stuck and what you are trying on a problem. This will allow me to understand what is troubling you and will result in a more efficient response.

When trying to set up an appointment via email, be sure to include times you are available, and an estimate of how much time you think you may need.

ANNOUNCEMENTS:

You are expected to regularly check your UNA email for information relating to this class. Not reading these announcements and thus not learning about the necessary information is not a valid excuse, even if it affects your grade.

SIGNIFICANT DATES:

August 19 – First Day of Class
August 26 – Last Day to Receive 100% Refund
September 7 – NO CLASS – Labor Day
October 8 – Midterm
October 9 – NO CLASS – Fall Break
October 16 – Last Day to Drop a Class with a “W”
November 18 – Last Day to Drop a Class with a “WP/WF”
November 25 – 29 – NO CLASS – Thanksgiving Holiday
December 2 – Last Day of Fall Classes
December 3 – NO CLASS – Study Day
December 4 –9 – Final Exams

IX. UNIVERSITY POLICIES

A. Academic Honesty: Students of the university academic community are expected to adhere to commonly accepted standards of academic honesty. Allegations of academic dishonesty can reflect poorly on the scholarly reputation of the University including students, faculty and graduates. Individuals who elect to commit acts of academic dishonesty such as cheating, plagiarism, or misrepresentation will be subject to appropriate disciplinary action in accordance with university policy.

Incidents of possible student academic dishonesty will be addressed in accordance with the following guidelines:

1. The instructor is responsible for investigating and documenting any incident of alleged academic dishonesty that occurs under the instructor's purview.
2. If the instructor finds the allegation of academic dishonesty to have merit, then the instructor, after a documented conference with the student, will develop a plan for disciplinary action. If the student agrees to this plan, then both instructor and student will sign the agreement. The faculty member will forward a copy of the signed agreement to the Office of Student Conduct for record-keeping purposes.
3. If the student disagrees with the instructor's proposed plan for disciplinary action and wishes to take further action, he/she is responsible for scheduling a meeting with the chair of the department where the course is housed to appeal the proposed disciplinary plan. The department chair shall mediate the matter and seek a satisfactory judgment acceptable to the faculty member based on meetings with all parties. If a resolution is reached, the disposition of the case will be forwarded to the Office of Student Conduct. If a resolution at the departmental level is not reached and the student wishes to take further action, he/she is responsible for scheduling a meeting with the dean of the college where the course is housed to appeal the proposed disciplinary plan. The college dean shall mediate the matter and seek a satisfactory judgment acceptable to the faculty member based on meetings with all parties. If a resolution is reached, the disposition of the case will be forwarded to the Office of Student Conduct. If a resolution at the college level is not reached and the student wishes to take further action, he/she is responsible for scheduling a meeting with the Vice President for Academic Affairs and Provost (VPAA/P) to appeal the proposed disciplinary plan. The VPAA/P shall mediate the matter and seek a satisfactory judgment acceptable to the faculty member based on meetings with all parties. After reviewing all documentation, the VPAA/P may, at his/her discretion, choose either to affirm the proposed action, to refer the case to the Office of Student Conduct for further review, or to dismiss the matter depending on the merits of the case. The final disposition of the case will be disseminated to appropriate parties, including the Office of Student Conduct.
4. If a student is allowed academic progression but demonstrates a repeated pattern of academic dishonesty, the VPAA/P may, after consultation with the Office of Student Conduct, assign additional penalties to the student, including removal from the University.

B. Communication:

The official method of communication at UNA is UNA portal, with emphasis placed on University email.

C. Disability Accommodations:

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the University offers reasonable accommodations to students with eligible documented learning, physical and/or psychological disabilities. Under Title II of the Americans with Disabilities Act (ADA) of 1990, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Amendment Act of 2008, a disability is defined as a physical or mental impairment that substantially limits one or more major life activities as compared to an average person in the population. It is the responsibility of the student to contact Disability Support Services to initiate the process to develop an accommodation plan. This accommodation plan will not be applied retroactively. Appropriate, reasonable accommodations will be made to allow each student to meet course requirements, but no fundamental or substantial alteration of academic standards will be made. Students needing assistance should contact Disability Support Services (256-765-4214).

D. Title IX:

The University of North Alabama has an expectation of mutual respect. Students, staff, administrators, and faculty are entitled to a working environment and educational environment free of discriminatory harassment. This includes sexual violence, sexual harassment, domestic and intimate partner violence, stalking, gender-based discrimination, discrimination against pregnant and parenting students, and gender-based bullying and hazing.

Faculty and staff are required by federal law to report any observations of harassment (including online harassment) as well as any notice given by students or colleagues of any of the behaviors noted above. Retaliation against any person who reports discrimination or harassment is also prohibited. UNA's policies and regulations covering discrimination and harassment may be accessed at www.una.edu/titleix. If you have experienced or observed discrimination or harassment, confidential reporting resources can be found on the website or you may make a formal complaint by contacting the Title IX Coordinator at 256-765-4223.

DISCLAIMER:

This is a general policy statement and is subject to change by the instructor at any time.