# UNIVERSITY OF ALABAMA AT BIRMINGHAM <br> MA 102 <br> COURSE SYLLABUS 

Term: Spring 2023
Section: ZNF
Instructor: Laura Stansell
Instructor email: stansell@uab.edu
Instructor office hours: Thursdays, 1:45-2:45 in HHB2O2 (Other hours available by request)
Instructor phone: Department of Mathematics, 205-934-2154

Weekly Course Meetings: Tuesdays, 12:30 to 1:45 pm in HHB 126.
Thursdays, 12:30 to 1:45 pm in HHB 202.

WITHDRAWAL - The last day to drop this course without the payment of full tuition and fees is January 17, 2023. The last day to withdraw from this course with a grade of $W$ is March 21, 2023.

Students in this course are required to begin Homework 1 in MyLab and Mastering during the Drop/Add period of the term. Failure to begin Homework 1 by the end of the Drop/Add period may result in administrative withdrawal from the course. Students who add the course after the first day of class are required to contact the course instructor within 24 hours of enrollment for specific instructions.

NOTE: For Course Syllabi posted prior to the beginning of the term, the Course Instructor reserves the right to make changes prior to or during the term. The Course Instructor will notify students, via email or Canvas Announcement, when changes are made in the requirements and/or grading of the course.

PREREQUISITES - "C" or better in MA 096, Ma097, or MA 098, or "P" in MA 098. Or beginning freshmen meet Math Screening requirements (see ACT Math Subscore/GPA Grid in the latest on-line UAB Class Schedule). Transfer students must have an appropriate score on the Advanced Screening Test in order to be eligible for MA 102.

Course Description: (3 semester hours). Absolute values. Cartesian coordinates. Graphs of equations. Concept of a function. Function notation. Lines. Linear systems. Word problems with linear models. Algebra of polynomials. Factoring of polynomials. Polynomial Division. Algebra of fractional expressions. Literal equations. Rational equations. Word problems with rational models. Integer and rational exponents. Algebra of radical expressions. Radical equations. Complex numbers. Introduction to quadratic functions. Quadratic equations.

## Learning Outcomes:

- Students can solve linear equations and inequalities in one variable, can solve absolute value equations and inequalities, and can use interval notation and the real number line for describing solution sets. Students can graph linear equations in two variables and are able to recognize and use the equation of a straight line in different forms.
- Students can use the slope to identify parallel or perpendicular lines, can solve linear systems of two equations algebraically and by graphing lines, and can use linear systems of two equations to solve a variety of verbal problems.
- Students can perform arithmetic operations on polynomial expressions, factor polynomials, and solve polynomial equations by factoring. Students know that solving polynomial equations of higher degree is intrinsically difficult.
- Students can identify rational expressions and functions and their domains, can multiply, divide, add, and subtract rational expressions, simplify complex fractions, and solve rational equations.
- Students know the rules of exponents and can apply them to simplify expressions involving positive and negative rational exponents. Students are able to combine, multiply and divide radical expressions and solve radical equations.
- Students are able to solve quadratic equations by factoring, by the square root method, by completing the square, and by using the quadratic formula. Students can interpret square roots of negative numbers as complex numbers and perform arithmetic operations on complex numbers.
- Students can create, interpret, and use linear, polynomial, and rational models to solve problems in a variety of application areas.

This course is about developing quantitative reasoning ability as well as acquiring specific mathematical skills (algebra, arithmetic, etc.). The above learning outcomes are realized in the course with a variety of learning opportunities (group work, lecture, and computer-aided instruction).

MATERIALS: The MyLab and Mastering access code is required and is available through Canvas with the First Day Access Program. Use the Course Materials link in Canvas to see your access code for MyLab.

To enhance your learning experience and provide affordable access to the right course material, this course is part of an inclusive access model called First Day. You can easily access the required materials for this course at a discounted price, and benefit from single sign-on access with no codes required in Canvas.

UAB will bill you at the discounted price as a course charge for this course. The charge should show as Book Charges First Day on the student's account in Banner.

It is NOT recommended that students Opt-Out, as these materials are required to complete the course. You can choose to Opt-Out on the first day of class, but you will be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended.

For more information and FAQs go to customercare.bncollege.com.

## Accessing MyLab and Mastering the first time to set up your account:

TO SET UP YOUR MYLAB ACCESS for this course, you must go to your Canvas course and click on "MyLabs \& Mastering" on the left side of your Canvas home page. This must be done in Canvas. The access code is available under the Course Materials link in Canvas. All Homework, Quizzes, and Tests for this course are available only through the MyLabs and Mastering link in Canvas.

## STUDENT EXPECTATIONS STATEMENT

The Course Syllabus and Schedule serve as a Contract by which the student must comply. An excuse of "not knowing" information covered in these documents is not an acceptable excuse for making mistakes in this class.

- Students are required to complete weekly assignments and learning activities by the deadline. All deadlines are based on CENTRAL TIME. See the class schedule for details.
- Students are expected to maintain an active BlazerNet account. All official correspondence will be sent ONLY to the @UAB.edu email address.
- Students are expected to read the Schedule and Syllabus for this class in Canvas.
- Students are expected to check their UAB email daily and respond within 48 hours to instructor emails.
- Students are expected to have a back-up plan in the event their computer has operational problems, there is loss of electricity, or there is loss of Internet access. These are not an excuse for late or incomplete submission of assignments, nor are they acceptable reasons for an assignment deadline extension.
- Students are expected to review their grades and participation by clicking on Check Your Grade in MyLab (https://secure.cas.uab.edu/mll/db) on a regular basis.

TECHNOLOGY REQUIREMENTS - Students must have:

- A UAB email account that can be accessed daily.
- Email software capable of sending and receiving attached files.
- Updated virus protection software, installed and active, to prevent the spread of viruses via the Internet and email.
- Equipment that fully supports the Canvas Learning Management System and MyLab.

CLASS SCHEDULE - See Canvas for all assignment deadlines.

COURSE GRADES - Students earn their grade in the course by accumulating points. There are 1025 total available points, but the total calculated points are only 1000. The extra 25 points are built into the course as a "bonus cushion." No points are available after the Final Exam is taken, so students should earn as many points as possible throughout the semester by completing all assignments by the deadline. Note that COURSE GRADES are awarded by TOTAL POINTS EARNED, NOT by percentages. All assignment grades will be posted and maintained in the math department database, which can be accessed in by going to https://secure.cas.uab.edu/mll/db/.

| Grade Element | Max Pts <br> per <br> Assignment | No. of <br> Assignments | Total Points |
| :---: | :---: | :---: | :---: |
| Homework | 9 | 13 | 117 |
| Lesson Preps | 1 | 13 | 13 |
| In-Class Assignments \& Participation | 8 | 13 | 104 |
| Quizzes | 7 | 13 | 91 |
| Pre-Test Quizzes | 6 | 10 | 60 |
| Tests | 100 | 4 | 400 |
| Final Exam | 240 | 1 | 240 |
| Total |  |  | Calculated out of 1000 |


| Points Earned | Course Grade |
| :---: | :---: |
| $880-1000$ | A |
| $750-879$ | B |
| $620-749$ | C |
| $500-619$ | D |
| Below 500 | F |

COURSE STRUCTURE - This course is primarily computer-based. Students must have reliable access to BlazerNet so they can work on their assignments in MyLab and Canvas. All assignments are shown on your Canvas course calendar.

HOMEWORK: There are 13 homework assignments, and each is worth 9 points. Homework is completed and submitted in MyLab. An unlimited number of attempts can be made on each homework problem before the deadline, so students should be able to earn $100 \%$ on ALL HOMEWORK. If a problem is marked with a red $(\mathrm{X})$ as incorrect, then the student can click on Similar Exercise at the bottom of the page and work another problem correctly for full credit (before the deadline). Students can go in and out of the homework as many times as they like before the deadline (all of the work is automatically saved). Students earn points for homework completed on or before the due date. All homework is available at the beginning of the term, so students may work ahead as much as they like. There are NO EXTENSIONS or make-ups for missed homework because the work can and SHOULD BE completed IN ADVANCE of the deadlines. After the due date, students can review homework assignments and work similar exercises, but they can only earn 65\% credit for work completed after the due date. Grades will be displayed as a percentage in MyLab. The percentage will be converted to points when loaded into the math department database.

LESSON PREPS: There are 13 lesson prep assignments in MyLab and each assignment is worth 1 point. The purpose of the lesson prep is to give a brief introduction to each lesson in advance of the instructor's discussion of the related material in class. Students should complete each lesson prep before beginning the corresponding homework assignment. For example, Lesson 1 prep should be completed before beginning Homework 1. Lesson preps must be completed by the posted deadlines. Grades will be displayed as a percentage in MyLab. The percentage will be converted to points when loaded into the math department database.

IN-CLASS ASSIGNMENTS \& PARTICIPATION: For 13 weeks, students can earn 8 points per week by attending class and actively participating in learning activities as deemed appropriate by the instructor. Participation points may be assessed in real-time during the class/lab meeting or involve handwritten work to be collected and graded. Students who engage in activities not directly related to the learning objectives will not earn participation points for that class/lab and may be asked to leave the class/lab session for that day. Examples of conduct that could cause a loss in participation points include (but are not limited to): unrelated cell phone or laptop usage during class/lab, working on material from other classes, listening to media on headphones or earbuds, eating, sleeping, arriving late, leaving early, copying work from other students, behavior or conversations that distract the student or others from the learning objectives, and engaging in other personal activities not related to learning objectives. No make-up work will be available for In-Class Assignments \& Participation points.

QUIZZES: There are 13 Quizzes, each is worth 7 points. Quizzes are completed and submitted in MyLab. Students take the Quizzes on their own schedule, but they can only earn the full 7 points if the Quiz is taken on or before the due date. Students must complete the Quizzes BY THEMSEVLES without assistance from any person, notes, textbook, or internet resources. The Quizzes are timed, and they must be taken in one sitting within $\mathbf{3 0}$ minutes. Students cannot exit the Quiz or that will count as one of their attempts. Each quiz can be taken twice, and the highest score attained will count. All Quizzes are available at the beginning of the term, so students may work ahead as much as they like. There are NO EXTENSIONS or make-ups for missed Quizzes because the work can and SHOULD BE completed IN ADVANCE of the deadlines. After the due date, students can review Quizzes and use the learning aids, but they can only earn 65\% credit for a

Quiz submitted after the due date. Grades will be displayed as a percentage in MyLab. The percentage will be converted to points when loaded into the math department database.

PRE-TEST QUIZZES: There are 10 Pre-Tests Quizzes (2 parts for each Test) worth 6 points each. The due dates for Pre-Test Quizzes are set a few days ahead of the Test date. This gives students time to learn from the mistakes on the Pre-Tests and prepare for the Test. The student's first attempt on the Pre-Tests should be completed by the due date without any outside help or notes. This will help students gauge their true mastery of the material before taking the high-stakes Test. If you score poorly on the Pre-Tests expect to also score poorly on the Test. After submitting both Pre-Tests, students should click on "Review Your Previous Work" in MyLab. This will allow students to "Review" the Pre-Tests and use the learning aids to obtain mastery of the topics before taking the Test. Students are allowed unlimited attempts on Pre-Test Quizzes. Only the highest score will be kept. Grades will be displayed as a percentage in MyLab. The percentage will be converted to points when loaded into the math department database.

TESTS/FINAL EXAM: There are four Tests ( 50 minutes) and a Final Exam ( 120 minutes). Each test is worth 100 points and the Final Exam is worth 240 points. All tests are proctored in HHB 202 Lab on the scheduled due date and submitted through MyLab. Students are required to have a government issued photo ID during testing (UAB student ID, driver's license, etc). Students must use the computer-based (Windows/Safari) scientific calculator during testing. NO personal calculators or cell phone calculators are allowed. Students will be provided with scratch paper during a test, but no credit is given for work done on the scratch paper. Students should use the restroom before starting a Test. If a student leaves the Lab during testing (for any reason including restroom needs) and is gone longer than 5 minutes, they will be required to immediately submit their Test upon returning to the Lab and complete a new version of the Test within the remaining class time. If a student leaves the Lab during testing more than once, the student's current Test will be submitted, and no further attempts will be offered. All Test grades will be displayed as a percentage in MyLab. The percentage will be converted to points when loaded into the math department database https://secure.cas.uab.edu/ml//db/ .

In the event UAB moves to remote or hybrid learning, students will use ProctorU services for remote testing. Students may test their equipment by going to https://test-it-out.proctoru.com/ . A webcam is required. Note that the following cannot be used for testing with ProctorU: Chromebooks, Tablets, Linux operating systems, Virtual machines, Windows 10 in S mode, Surface RT. For more information, visit https://www.uab.edu/elearning/academic-technologies/proctoru

## MAKE-UP WORK POLICY:

Missed Test: If a student misses ONE test during the semester, the student may complete a Missed Test Request Form by emailing the course instructor to request the form and returning the completed form by email to the course instructor no later than 12 pm on the last day of classes (before final exam week).
Completing the Missed Test Request Form allows students to request that the Final Exam score earned will also be used to replace ONE missed test during the term. Note that only one missed test grade may be replaced. It is strongly encouraged that students complete the test request form within 48 hours of the missed test.

Overdue assignments/Late penalty: Homework and Quiz assignments submitted after the due date will incur a 35\% late penalty deduction. This penalty applies to all MyLab Lesson Prep, Homework, and Quiz assignments except for Week 1 assignments and Pre-Test Quizzes. Students should work well ahead of the due dates to avoid late penalties that might be caused by unexpected delays such as illness, accidents, or family emergencies.

Bonus points/make-up work: Students will not be given bonus point assignments or make-up work. Instead, the bonus points are already built into the way the grade is calculated. This is how it works, there are 1025 total available points, but the total calculated points are only 1000. The extra 25 points are built into the course as a "bonus cushion." This cushion is applied to all students uniformly including those who miss participation grades due to illness or unforeseen emergencies. No make-up work will be available for In-Class Assignments \& Participation points.

## Math Learning Lab (MLL)

The Math Learning Lab (MLL) in 202 Heritage Hall offers in person tutoring. Tutors WILL NOT help with graded assignments, solve all of your problems, or work with you for extended periods of time, but they WILL help guide you so that you can complete your work independently. Be sure to bring your notes, work, and materials. No appointment is needed. The MLL is open Monday-Friday from the first day of class to the last day of class. Tutoring is NOT available during holidays, breaks, and Final Exam week. No food or drink allowed except bottled water.

Extended Absences: Attendance is fundamental to course objectives and to the integrity of this course. Courses in the Mathematics Department require a variety of activities that involve interaction with the instructor and/or interaction with other students. Excessive absences and missed assignments seriously jeopardize a student's ability to successfully complete the course. In the event of excessive absences, students should be prepared to officially withdraw from the course through the Registrar's Office. In cases involving medical hardships, military duty, or other serious personal situations after the withdrawal date for a course, the student may participate in the Academic Policy Appeal (accessed and submitted through Blazernet Links/Forms). More than two weeks of missed meetings is considered too much to be successful in the course.

NON-HARASSMENT, HOSTILE WORK/CLASS ENVIRONMENT - The UAB College of Arts and Sciences expects students to treat fellow students, their Course Instructors, other UAB faculty, and staff as adults and with respect. No form of hostile environment or harassment will be tolerated by any student or employee. In this class we will only use constructive criticism and will work to build a community of lifelong learners.

HONESTY AND PLAGIARISM - The awarding of a university degree attests that an individual has demonstrated mastery of a significant body of knowledge and skills of substantive value to society. To ensure this, UAB expects all students to abide by the UAB Academic Honor Code:

DSS Accessibility Statement: UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act, and you require accommodations, please contact Disability Support Services for information on accommodations, registration and procedures. Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty and staff. If you are registered with Disability Support Services, please contact DSS to discuss accommodations that may be necessary in this course. If you have a disability but have not contacted

Disability Support Services, please call 934-4205 or visit http://www.uab.edu/dss or Hill Student Center Suite 409.

Title IX Statement: The University of Alabama at Birmingham is committed to providing an environment that is free from sexual misconduct, which includes gender-based assault, harassment, exploitation, dating and domestic violence, stalking, as well as discrimination based on sex, sexual orientation, gender identity, and gender expression. If you have experienced any of the aforementioned conduct we encourage you to report the incident. UAB provides several avenues for reporting. For more information about Title IX, policy, reporting, protections, resources and supports, please visit http://www.uab.edu/titleix for UAB's Title IX Policy, UAB's Equal Opportunity, Anti-Harassment Policy and Duty to Report and Non-Retaliation Policy.

