

Fall 2024

SYLLABUS for MA090 BEGINNING ALGEBRA

Section: MA090-04 (82542) 4 credits (1-1:50 am) MTWR Room: Jamrich 2319

Instructor: Richard Balding

Office: Jamrich Room 2225

Office phone: 227-2020 (No voice mail)

e-mail: rbalding@nmu.edu (best way to contact me)

Office Hours:

11am -12:50 pm M-R or by appointment

Math/CS office: 227-2020

Teaching Assistant: Lauren Anderson (laurenan@nmu.edu)

Prerequisite: AT LEAST a C- in OC 080 or a satisfactory score on the Math Placement Exam.

Required Materials:

- (1) **Text:** *Beginning & Intermediate Algebra* (Sixth Edition) by Miller, O'Neill, and Hyde
- (2) NMU e-mail account which you must check DAILY
- (3) Pencil and eraser: **REQUIRED** for all tests, quizzes, and submitted homework; graph paper, ruler or straight edge
- (4) Scientific calculator (fraction key useful) that is without algebraic technology. **A cell phone calculator is not acceptable.** You do not need a graphing calculator.

Calculators may not be allowed to be used on some initial quizzes and tests.

Note: Laptops will not be used in this class.

Additional Expectations:

- arrive for every class with necessary tools: text, notebook, pencil, and calculator
 - keep cell phones and other electronic devices out of sight and on silent (Please speak to the instructor if you anticipate receiving an emergency call during class.)
 - be attentive and actively participate in class
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COURSE DESCRIPTION: MA090 includes the study of linear expressions and equations, inequalities, polynomials, factoring, and an introduction to quadratic expressions and equations. (Emphasis on factoring.)

Student Learning Outcomes for Beginning Algebra: After successful completion of MA090 students will be able to:

Chapter 2: Linear Equations and Inequalities

- 1) Solve linear equations in one variable, including clearing fractions and decimals
- 2) Solve and graph linear inequalities in one variable; use interval notation
- 3) Solve applied problems such as applications involving consecutive integers, geometry, percent, mixture, and uniform motion

Chapter 3: Graphing Linear Equations in Two Variables

- 4) Graph and interpret linear equations and linear inequalities, including the slope, y-intercept, and both x- and y-intercepts
- 5) Determine equations of lines given the slope and a point or given two points; Determine equations of lines which are parallel or perpendicular to a given line
- 6) Solve applied problems such as writing a linear model from observed data points

Chapter 4: Systems of linear equations

- 7) Solve systems of linear equations
- 8) Use systems of linear equations to solve applied problems involving geometry, cost, investment, mixture, and Distance

Chapter 5: Polynomials and Properties of Exponents

- 9) Apply exponent rules to algebraic expressions
- 10) Use order of operations to simplify and perform operations on algebraic expressions

Chapter 6:

- 11) Factor the Greatest Common Factor (GCF) from polynomials
- 12) Factor four-term polynomials by grouping

- 13) Factor quadratic trinomials using the AC-method, including problems where the lead coefficient is greater than one
- 14) Factor the difference of two squares
- 15) Factor perfect square trinomials
- 16) Factor the sum and difference of cubes
- 17) Solve equations using the zero product property
- 18) Solve applied problems using quadratic equations, including applications involving the Pythagorean Theorem

Learning outcomes will be assessed using assignments, quizzes, tests, and the final exam.

ATTENDANCE:

Daily attendance is expected and it will be recorded. Absence from class, for whatever reason, does not excuse a student from any class work or assignments missed. The student must assume full responsibility for making arrangements for any assignments missed due to the absence. Texting in class may, at the discretion of the instructor, result in a student being marked absent for the class. An attendance score (worth 25 points) will be determined and may replace one of your quizzes (see explanation later).

ASSIGNMENTS:

PLAN TO SPEND AN AVERAGE OF 1 - 2 HOURS ON EACH ASSIGNMENT. If your schedule will not permit this much homework time, I recommend that you seriously consider dropping the course.

Reading and problems are assigned each day. Take accurate and complete notes on the material presented in class. Each homework assignment (and each section within a homework assignment) should start on a clean sheet of paper and start with a **heading** which includes your name, the date assigned, page and section numbers, and the problem numbers assigned. In doing homework, copy the problem and **SHOW YOUR WORK** for each problem assigned. **Make corrections** as we discuss the problems. **SUGGESTION:** Do not erase your original work. Do your corrections in red ink.

Assignments will be collected and graded on test days.

Remember: **MATHEMATICS IS LEARNED BY DOING, NOT BY OBSERVING!**

TESTS & QUIZZES:

All quizzes and tests must be written in pencil. Quizzes will be given often and will be worth 25 pts each. Some may not be announced. At least one question per quiz **may** be taken from the **homework section** of your portfolio. **You may not use your textbook for these questions.** No make-up quizzes will be given without **PRIOR ARRANGEMENT**. For a student with fewer than 11 absences, the lowest 25-point quiz score will be dropped replaced by the quiz score. There will be 5 tests, each worth 100 points. Tests will cover assigned reading, concepts presented in class, notes, and assigned homework. **NO TEST SCORES WILL BE DROPPED.** You must take tests and quizzes at their scheduled times. No make-up is possible for any test unless you notify me **before** test time. A documented excuse may be requested in order to take a make-up test. Grades on quizzes and tests are not “curved”. **There are no “do overs” on tests** – be ready the first time !!!

FINAL EXAM: The *comprehensive* final exam will be worth 100 points (approximately)

WRITTEN WORK:

For **written work** (quizzes, graded assignments, tests, final exam, homework) you will be graded not only on correctness, but also on clarity of work. If I cannot read your writing, then a correct answer **will not** get you full credit. You must show all steps. Just giving the answer for a problem requiring work will not earn full credit. Again, you must show all work. Word (application) problems can often be solved by just “thinking” about it. However, in this class you must use algebra and show all work to earn credit.

GRADES:

To pass this course you must take all tests. Your course grade will be based on total points earned on your quizzes, tests, assignments, final exam, and bonus points (extra credit). Grades on tests and quizzes are not “curved.”

The grading scale is: A: 90 - 100%; B: 80 - 89%; C: 70 - 79%; D: 60 - 69%; F: < 60%

(NOTE: A grade of AT LEAST C– in MA090 is required for registration in MA100.)

EXTRA HELP: My Office: during regular office hours or by appointment
Office Hours with the Teaching Assistants usually in Jamrich 2102 unless scheduled in a different location
Developmental Math Tutoring Lab (Jamrich 2102) Hours: Monday – Friday from 9 am – 6 pm
Math Study Lab/Tutoring Room: Jamrich 2100
Free extra help is available. Tutors are available Monday – Friday from 9 am – 6 pm
All-Campus Tutorial Service (free) in the LRC (evening hours available several days per week)

Study groups are recommended.

The following websites contain short video lessons: www.amybarnsleymath2.com (MA090 topics)

DISABILITY SERVICES: If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1737 or disability@nmu.edu). Reasonable and effective accommodations and services will be provided to students if requests are made **in a timely manner**, with appropriate documentation, in accordance with federal, state, and University guidelines.

Here is the website for disability services: <http://www.nmu.edu/disabilityservices/node/1>

IMPORTANT DATES: (Full Semester Courses)**Drop:**

Last day to drop a class with no course record (100% refund & no grade) is Tuesday, September 3, 2024 by 5 pm.

Drop Procedure: <http://www.nmu.edu/records/adddropprocedure>

Withdrawals:

Last day for course withdrawal is Friday December 6, 2024 by 5 pm. I will recommend withdrawal for any student earning below 60%. A withdrawal (W) grade and a failing (F) grade have the same effect on your full time status. The difference is that an F grade hurts your GPA, but a W grade does not. It always benefits you to get a W, instead of an F.

(Remember: A grade of AT LEAST C– (70%) in MA090 is required for registration in MA100.)

Withdrawal procedure: <http://www.nmu.edu/records/node/19>

Final Exam: Monday, December 9, 12:00 pm