# NKU SYLLABUS FOR MAHD 095 – ##

## ESSENTIAL ALGEBRA - FALL

**INSTRUCTOR:** Name            **EMAIL:** **address**@nku.edu

**OFFICE:** MEP 4##     **OFFICE PHONE:** 572-####
**DEPT PHONE:** 572-6347

**OFFICE HOURS:** times or by appointment

**Course Description:** MAHD 095 is an introductory algebra course which builds a basic foundation of algebraic skills. This course is a prerequisite to various courses such as MAHD 099, MAT 115, and STA 205.

This course does not count toward graduation, does not meet the general education requirement and does not count in the gpa.

**PREREQUISITE:** Grade of C− or better in MAHD 090 or placement.

**TEXT:** Introductory Algebra through Applications by Geoffrey Akst & Sadie Bragg, 3$^{rd}$ edition **and/or** MyMathLab Student Access Code. Material to be covered: Chapters R, 1–5, sections 6.1, 6.2, 8.1, 9.3, 9.4, & 7.6

     A MyMathLab Student Access Kit is required for this course. The access kit comes packaged with the textbook if purchased new at the university bookstore. DO NOT DISCARD this kit. If you choose to purchase the textbook elsewhere, it may not include the Student Access Kit. It would most likely be more expensive to purchase the textbook and code separately.
     If you choose, you may purchase only the MyMathLab Student Access Code. The textbook can be accessed electronically with the access code and pages can be printed. However, you will not have a hard copy of the textbook. All homework must be completed on MyMathLab. The access code can be purchased directly from www.mymathlab.com.

**MATERIALS:** A scientific calculator may be used on select material in this course*. No graphing calculators, computer algebra systems, or their equivalent may be used on any content in any Developmental Mathematics course. Students may not share a calculator during any quiz, test, or the final examination.

**\*CALCULATOR POLICY FOR MAHD095:**
- Calculators may be used on the Pre-Test and the Post-Test.
- Calculators may not be used on any tests that cover pre-algebra review material such as operations with real numbers (including fractions and signed numbers) or with simplifying/evaluating algebraic expressions. (chapters R and 1 in Akst & Bragg, 3rd ed.)
- Calculators are permitted on any subsequent tests and the final exam.

- Calculators on cell phones, iPods, or other electronic/digital devices may not be used.
- If you do not have an appropriate calculator you will not be permitted to use one on the tests or quizzes.

**To avoid the appearance of impropriety, during any test given in a Developmental Mathematics course, any device capable of sending messages, taking pictures, or accessing the internet (cell phones, IPod, etc) must be turned off and stored in an inaccessible location.  A violation of this policy will result in a 0 on that test.**
**ATTENDANCE:**  You are expected to be present for **EVERY** class.  Attendance will be taken.  Students are responsible for all material assigned or discussed in class.

**HOMEWORK:**  Homework **will be assigned each class day on MyMathLab**.  There may be more than one assignment on a given day.  Homework assignments must be completed on **MyMathLab**.  There is a MyMathLab link found on Blackboard.  **LATE HOMEWORK WILL RECEIVE REDUCED CREDIT.**  The homework grade will be scaled to 85 points.  Note: These assignments should be considered a <u>minimum</u> preparation for the following class.

**In-Class/Take Home Activities:** In-class and take home activities will be assigned.  You must be in class to receive credit for the in-class activities.  **THERE WILL BE NO MAKEUPS ON activities even with an excused absence.**  The in-class activity grade will be scaled to 15 pts.

**QUIZZES:**  Quizzes will be given periodically. **THERE WILL BE NO MAKEUPS ON QUIZZES even with an excused absence.** Two lowest/missed quiz grade will be dropped. The quiz grade will be scaled to 100 points.

**TESTS:**  There will be five 100-point tests and a 200-point final exam.  All tests and the final exam will be cumulative.  Only one test may be made up and then only for a serious, verifiable reason.  You must contact the instructor **ON OR BEFORE** the scheduled test day and arrange to take a makeup before the next class.  If you do not contact the instructor on or before the test day, no makeup will be given and you will receive a grade of zero for that test.

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| 5 Tests at 100 pts each | 500 pts | 93-100 | A | 77-79.9 | C+ |
| 9 Quizzes | 100 pts | 90-92.9 | A- | 73-76.9 | C |
| Homework/Take Home Act. | 100 pts | 87-89.9 | B+ | 70-72.9 | C- |
| Final Exam | <u>200 pts</u> | 83-86.9 | B | Below 70 | F |
| Total points | 900 pts | 80-82.9 | B- | | |

**GRADING:**

**FINAL EXAM:**        Date and time

**WITHDRAWALS:**   The last day to drop with a 50% tuition adjustment is Monday, September 8. The last day to withdraw (with no reimbursement) is Monday, October 27.  Withdrawals after that date are generally NOT permitted. Documentation is required for any late withdrawal.

**Tentative Course Schedule:**  A calendar indicating quiz dates and test dates can be found on the MyMathLab homepage for this course.  Due dates for the homework are found under the homework tab.
>        **Or**

A calendar indicating the sections that will be covered each day and the dates of quizzes and tests is attached to this syllabus. Any changes to this calendar will be announced in class.

## Credit Hour Policy Statement

In accordance with federal policy, NKU defines a credit hour as the amount of work represented in the achievement of student learning outcomes (verified by evidence of student achievement) that reasonably approximates one hour (50 minutes) of classroom instruction and a minimum of two hours of out-of-class student work. For every course credit hour, a typical student should expect to spend at least three hours per week of concentrated attention on course-related work including, but not limited to, class meeting time, reading, reviewing, organizing notes, studying and completing assignments. At least an equivalent amount of time is expected for other academic activities such as online courses, laboratory work, internships, practica, studio work and other academic work leading to the award of credit hours.

Estimates of the time required for a typical student to complete course expectations are as follows:

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|---|---|
| In-class:  2 days x 120 minutes x 15 weeks | 60.0 hrs (3600 minutes) |
| Or 3 days x 80 minutes x 15 weeks | |
| Read Text/View videos or | |
| MyMathLab examples: 41 sections x 30 minutes | 20.5 hrs (1230 minutes) |
| MyMathLab Homework: 41 sections x 90 minutes | 61.5 hrs (3690 minutes) |
| Quiz Preparation:  9 x 25 minutes | 3.75 hrs (225 minutes) |
| Tutorials | 10.0 hrs (600 minutes) |
| Test Preparation: 5 tests x 180 minutes | 15.0 hrs (900 minutes) |
| Self-Assessment (after each test)          5 x 45 minutes | 3.75 hrs (225 minutes) |
| Final Exam and Preparation: 360 minutes | 6.0 hrs (360 minutes) |
| | |
| Total | 180.5 hrs (10830 minutes) |

## Student Learning Outcomes:

Students will be able to:
1.  Simplify and evaluate algebraic expressions using order of operations.
2.  Solve linear equations and inequalities in one variable.
3.  Solve literal equations for the designated variable.

4. Solve proportions.
5. Graph linear equations in two variables by plotting points and finding intercepts.
6. Graph linear inequalities in two variables.
7. Find the slope of a line given two points, its graph, or its equation.
8. Simplify expressions with integer and rational exponents using the product, quotient, and power rules.
9. Add, subtract, multiply, and divide polynomials with one or more variables.
10. Factor the greatest common factor from a quadratic; factor simple trinomials of the form $ax^2 + bx + c.$
11. Simplify square roots of numeric and algebraic expressions.
12. Solve quadratic equations.
13. Determine an equation of a line given two points or a point and slope.
14. Solve systems of linear equations in two variables by graphing, substitution, and elimination.
15. Graph parabolas by finding the vertex and axis of symmetry and plotting points.
16. Apply the concepts learned in the course to solve application problems.

Critical reading and writing skills will be emphasized in this course. Reading and writing exercises will be assigned with each chapter. Students will be required to express the solutions to their algebraic manipulations in complete, coherent sentences.

**The mission statement, goals, and objectives of the Developmental Mathematics Program are posted in the Developmental Math Center, UC 170.**

**DEPARTMENT SYLLABUS:** The Departmental Syllabus located at the link http://lap.nku.edu/developmental/mathematics/syllabi.html gives important information common to the University as well as general guidelines for all MAHD classes. This syllabus is also available on Blackboard for this class.

**THE INSTRUCTOR RESERVES THE RIGHT TO MAKE ANY CHANGES IN THE SYLLABUS AS DEEMED NECESSARY.**