# NKU SYLLABUS FOR MAHD 099 – ##

## **INTERMEDIATE ALGEBRA - FALL**

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

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

**OFFICE HOURS:** times or by appointment

**Course Description:** MAHD 099 is an intermediate algebra course in which you will learn the algebraic skills necessary for success in various STEM courses. This course is a prerequisite to MAT 109: Algebra for College Students and select science classes. If you are not sure if you need this class, please speak with me.

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 095, MAHD 094, or placement.

**TEXT:** Intermediate Algebra: 12<sup>th</sup> Edition by Marvin L. Bittinger and/or MyMathLab Student Access Code. Material to be covered: Parts of chapter 1, most of chapters 2, 4–7.

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. Homework must be completed on MyMathLab. The access code can be purchased directly from <u>www.mymathlab.com</u>.

**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 MAHD099:

- Calculators may be used on the Pre-Test and the Post-Test.
- Calculators may be used on all 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 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 minimum preparation for the following class.

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

**TESTS:** There will be four 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. If you earn at least a 75% on the homework **and** if your final exam percentage is higher than your lowest test percentage, then the lowest test percentage will be replaced by the final exam percentage. The maximum replacement score is 75%.

4 Tests at 100 pts each	400 pts	93-100	А	77-79.9	C+
5 Quizzes	100 pts	90-92.9	A-	73-76.9	С
Homework/Take Home Act.	100 pts	87-89.9	B+	70-72.9	C-
Final Exam	<u>200 pts</u>	83-86.9	В	Below 70	F
Total points	800 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:

In-class: 2 days x 75 minutes x 15 weeks Or 3 days x 50 minutes x 15 weeks	37.5 hrs (2250 minutes)
Read Text/View MyMathLab examples or	
videos: 42 sections x 30 minutes	21.0 hrs (1260 minutes)
MyMathLab Homework: 42 sections x 75 minutes	52.5 hrs (3150 minutes)
Quiz Preparation: 5 x 30 minutes	2.5 hrs (150 minutes)
Tutorials	6.0 hrs (360 minutes)
Test Preparation: 4 tests x 150 minutes	10.0 hrs (600 minutes)
Self-Assessment (after each test) 4 x 30 minutes minutes)	2.0 hrs (120
Final Exam and Preparation: 300 minutes	5.0 hrs (300 minutes)

Total

136.5 hrs (8190 minutes)

### **Student Learning Outcomes:**

Students will be able to:

1. Factor polynomials by grouping, ac-method, and recognition of patterns such as difference of squares and perfect trinomial squares.

- 2. Add, subtract, multiply, and divide rational expressions containing monomials, binomials, and trinomials in the numerators and denominators.
- 3. Solve rational equations containing monomials, binomials, and trinomials in the numerators and denominators.
- 4. Determine whether a given correspondence or graph represents a function.
- 5. Evaluate functions and find the domains of polynomial, rational, and square root functions.
- 6. Determine an equation of a line given two points, a point and slope, or a point and a parallel or perpendicular line.
- 7. Solve absolute value equations and inequalities.
- 8. Solve equations with radicals.
- 9. Simplify square roots and cube roots of monomials in one or several variables. Introduce complex numbers.
- 10. Evaluate real numbers raised to rational exponents and simplify expressions containing rational exponents.
- 11. Convert expressions with rational exponents to radical form and vice versa.
- 12. Solve quadratic equations using factoring, completing the square, and the quadratic formula.
- 13. Graph parabolas by finding the vertex and axis of symmetry and plotting points.
- 14. Apply the concepts learned in the course to solve application problems involving area of rectangles and triangles, Pythagorean Theorem, motion, and work.

#### 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 <u>http://lap.nku.edu/developmental/mathematics/syllabi.html</u> 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.