Syllabus
Basic Algebra (MTH 8, All sections, SPRING 2015)

Course Description: MTH 87 begins with a short TI 84 and pre-algebra review. It then proceeds to basic algebra topics such as linear equations and inequalities, rectangular coordinate system, graphs of linear equations, linear systems, polynomials, exponents, factoring, and quadratic equations with emphasis on graphing and applications through problem-solving. Internet access is mandatory.

- Section and Instructor Information:

<table>
<thead>
<tr>
<th>Section (s)</th>
<th>Instructor</th>
<th>Email</th>
<th>Office#</th>
<th>Phone</th>
<th>Office Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 3, 10</td>
<td>Chincholkar</td>
<td><a href="mailto:s.chincholkar@csuohio.edu">s.chincholkar@csuohio.edu</a></td>
<td>RT1551</td>
<td>216-523-7151</td>
<td>11:20 – 12:10 T, Th</td>
</tr>
<tr>
<td>4, 53</td>
<td>Manouchehri</td>
<td><a href="mailto:m.manouchehri@csuohio.edu">m.manouchehri@csuohio.edu</a></td>
<td>RT1555</td>
<td>216-523-7439</td>
<td>12:30 – 1:30 M-F</td>
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MTH 87 will be graded on a PASS/FAIL mastery basis. To PASS a student must complete ALL mini-mods (and all assignments within the mini-module) with an 80% or higher. Additionally, the student must attend 80% of in class time until ALL mini-mods are completed or they will receive a 5% final grade deduction. The Institutional credits earned in this course do not count toward graduation.

THERE IS A TOTAL OF 15 MINI-MODS TO COMPLETE.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interval</th>
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<tbody>
<tr>
<td>S(A) OR S(B)</td>
<td>ALL MINI-MODS COMPLETED WITH AN 80% OR HIGHER &amp; 80% ATTENDANCE UNTIL ALL MINI-MODULES ARE COMPLETE</td>
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<tr>
<td>S (A)</td>
<td>MINI-MOD AVERAGE 100%-90%</td>
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<tr>
<td>S (B)</td>
<td>MINI-MOD AVERAGE 89%-80%</td>
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<td>U(D or F)</td>
<td>NOT ALL MINI-MODS COMPLETED WITH AN 80% OR HIGHER</td>
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<td>U (D)</td>
<td>7-14 MINI-MODS COMPLETED</td>
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<td>U (F)</td>
<td>1-6 MINI-MODS COMPLETED</td>
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COURSE DESIGN:
Students will use MyLabPlus (MLP) to complete this course. Instruction will be delivered via videos on MLP as well as through on-demand assistance from the instructor. Students will complete the following for each of the 15 mini-mods. Each Test will have material from both current and previous Mini Mods.
   1. Pre-Test on All Current and Previous Mini Mods
      a. If a student earns an 85% or above on the pre-test that grade will be their final grade for the mini-mod
      b. A student is allowed ONE pre-test per mini module
   2. Mini-Mod Topics Videos and accompanying Notebook
      a. To be eligible to take the test each mini-module topic personal notes must be completed.
   3. Mini Mod Topics Homework
      a. To be eligible to take the test each mini-module topic homework must be completed with an 80% or above.
   4. Mini-Mod Test on All Current and Previous Mini Mods
      a. To complete the mini-module a student must earn an 80% or higher on the comprehensive test. A student may re-take tests as needed.

For the test appropriate work and reasoning must be shown. Any student not completing all of the material by the end of the semester will earn a grade of U(D) or U(F). However, the student will have the ability to register for and continue the course in the next semester after a grade of U(D) or U(F).

Additionally, students are expected to make minimal progress on the course requirements. A schedule of minimal progress is included in this syllabus.

THINGS TO NOTE:
- A total of 6-12 hours should be spent on this course per week.
- **Calculator Lending Policy:**
  - TI-84 Calculators will be lent for EMPORIUM use on a first come first serve basis. They may not be removed from the EMPORIUM. If they are lost, you must pay $149 to have it replaced. Students who have not signed the Lending Agreement may not borrow a calculator.
- **Testing Policy:**
  - Pre and Post Tests can only be taken in the EMPORIUM. Tests are closed notes and book. No cell phones are allowed during testing. A student can take tests outside of class time when the EMPORIUM is open. To take a test out of class time, the student must present their **student ID** at the time of test. For a test to be reviewed for partial you MUST have earned an **11 out of 15**. Only your instructor can review your exam. The last exams will be given 45 minutes prior to the close of the EMPORIUM for the day.
- **EMPORIUM Hours of Operation**
  - Monday – Friday 9am -2:25pm
  - Monday, Wednesday 6:00pm -7:50pm
- Grades A, B, D or F **WILL NOT** calculate into a student’s GPA.
Students who pass this class can enroll in MTH 115, MTH 116, or MTH 148.

**TEXTBOOK:** Introductory Algebra and Intermediate Algebra Notebook. Custom Edition for Cleveland State University, Pearson (2013) can be picked up at the bookstore.

**Calculator:** The TI-84 scientific calculator is recommended for this class. It is the required calculator for MTH 115, MTH 116 and MTH 148.

Bring your notebook, calculator and headphones to every class. These materials WILL NOT be provided for you. Retain all graded work until the end of the semester.

**Educational access** is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Any student who may need an accommodation based on the impact of a disability should contact the Office of Disability Services at (216) 687-2015. The Office is located in MC147. Accommodations need to be requested in advance and will not be granted retroactively.

**Mathematical Learning Center**
If you need (free) mathematical tutoring, contact the Mathematics Learning Center Main Classroom Building 230 or 216-687-4549/4543.
Monday – Thursday, 9:30am-8pm; Friday 9:30am-3pm and Saturday, 11am-2pm ([http://www.csuohio.edu/sciences/dept/mathematics/learning_center.html](http://www.csuohio.edu/sciences/dept/mathematics/learning_center.html))

**Attendance**
Attendance is a fundamental component of success in this course. Therefore, class attendance is mandatory until the course is finished and is worth 5% of the course grade. Daily attendance will be monitored and reported to the university. Please be aware that tardiness; leaving early; long periods of time from stepping outside of class; as well as standard absences will be considered unexcused absence and reported as such. There is no difference between excused and unexcused absences. **Additionally, the student must attend 80% of in class time until ALL mini-mods are completed or they will receive a 5% final grade deduction.**

**Mini-Mod Pre-Test, Videos, Notebook and Homework**

Pre-Test: At the beginning of each mini-module students will take a pre-test on all current and previous mini mod content. If the student earns a score of at least 85% on the pre-test, the student will then be allowed to skip the entire associated mini-mod. The score earned on the pre-test will be the final score for the mini-mod. A student is allowed ONE pre-test attempt per mini mod. All pre-test MUST be taken in class.

Videos and Notebook: Every topic has a video to be accompanied by notes. The notes are to be completed with work shown. These notes will be reviewed by instructor before post-test can be taken.

Homework: Every topic will have homework to complete. To finish the topic homework the student must earn an 80% or above on the homework. Students will be allowed many attempts on each homework problem.

**Mini-Mod Post-Test on All Current and Previous Mini Mods**

Once the videos have been viewed, and the personal notes and homework have been completed with an 80% or above, then the student may attempt the mini-module test on all current and previous mini mod content. If the student earns a score of at least 80%, then the student may proceed to the next mini module. If the student scores below 80%, then the student must review the exam with the instructor and complete the instructor generated study plan and retake the test. **The student may not proceed to the next mini-module until earning at least 80% on the test**
and completing the instructor generated study plan. There is no limit to the number of attempts. Multiple failures may result in the student being required to complete additional work at the instructor’s discretion. All tests MUST be taken in the EMPORIUM, in ONE sitting.

Students should abide by the following schedule in order to complete the course on time.

**MANAGE YOUR TIME**

To complete all 15 modules, tests should be taken by the date listed. This is a self-paced class, so the student may be behind at some point or may be ahead. **REMEMBER IF YOU FINISH EARLY YOU ARE DONE AND NO LONGER REQUIRED TO ATTEND.** If all modules are not completed by the end of the semester, the student can register for MTH 87 again but start where left off for the subsequent semester.

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<th>Minimum Weekly Requirements</th>
<th>Week of Completion Testing by Friday of:</th>
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<td>Mini-Mod 1</td>
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<td>Mini-Mod 12</td>
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<td>Mini-Mod 14</td>
<td>Week 14</td>
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<tr>
<td>Mini-Mod 15</td>
<td>Week 15</td>
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- **Important Dates:**
  - The final day to drop any course without a “W”: Friday, January 23, 2015
  - The last day to withdraw: Friday, March 27, 2015.
  - No Classes
    - Martin Luther King Day: Monday, January 19, 2015
    - Presidents Day: Monday, February 16, 2015
    - Spring Recess: March 8-15, 2015
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- Topic 1.2 Fractions
- Topic 1.3 Order of Operations and Exponents
- Topic 1.4 Introduction to Real Numbers
- Topic 1.5 Graphing Real Numbers Using a Number Line
- Topic 1.6 Translating Phrases into Algebraic Inequalities
- Topic 1.7 Finding the Absolute Value of a Real Number

Mini-Mod 2 Adding and Subtracting with Real Numbers
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- Topic 2.2 Adding Real Numbers with Different Signs
- Topic 2.3 Finding the Opposite of a Real Number
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- Topic 2.5 Addition Properties of Real Numbers

Mini-Mod 3 Multiplying and Dividing with Real Numbers
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- Topic 3.2 Finding the Reciprocal of a Real Number
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Mini-Mod 4 Variables and Expressions
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- Topic 4.2 Evaluating Algebraic Expressions
- Topic 4.3 Simplifying Expressions
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- Topic 4.5 Translating Words into Symbols

Mini-Mod 5 Introduction to Solving Linear Equations
- Topic 5.1 Translating Words into Equations
- Topic 5.2 Linear Equations and Solutions
- Topic 5.3 Using the Addition Property of Equality
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Mini-Mod 6 Solving More Linear Equations and Inequalities
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**Mini-Mod 7 Slope and the Equation of a Line**
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• Topic 7.2 The Slope of a Line
• Topic 7.3 Slope-Intercept Form
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• Topic 7.5 Graphing Linear Equations of the form \( x=a, \ y=b \) and \( y=mx \)

**Mini-Mod 8 Writing Equation of a Line**
• Topic 8.1 Writing Equations of Lines Using a Point and Slope
• Topic 8.2 Writing Equations of Lines Using Two Points
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**Mini-Mod 9 Solving Systems of Linear Equations**
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• Topic 9.2 Solving by the Graphing Method
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**Mini-Mod 10 Introduction to Functions**
• Topic 10.1 Relations and Functions
• Topic 10.2 The Vertical Line Test
• Topic 10.3 Function Notation
• Topic 10.4 Evaluating Functions

**Mini-Mod 11 Introduction to Polynomials and Exponent Rules**
• Topic 11.1 Introduction to Polynomials
• Topic 11.2 Addition of Polynomials
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• Topic 11.4 Product Rule for Exponents
• Topic 11.5 Power Rule for Exponents

**Mini-Mod 12 Multiplying Polynomials**
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• Topic 12.2 Multiplying Binomials
• Topic 12.3 Multiplying Polynomials
• Topic 12.4 Multiplying the Sum and Difference of Two Terms
• Topic 12.5 Squaring Binomials
Mini-Mod 13 Dividing Polynomials and More Exponent Rules
- Topic 13.1 The Quotient Rule
- Topic 13.2 Integer Exponents
- Topic 13.3 Scientific Notation

Mini-Mod 14 Factoring Polynomials
- Topic 14.1 Greatest Common Factor
- Topic 14.2 Factoring by Grouping
- Topic 14.3 Factoring Trinomials of the Form $x^2 + bx + c$
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- Topic 15.2 Factoring Polynomials
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