College Algebra for Calculus Preparation
MA 111 – FALL 2013

CLASS ID: MA 111 – 1, M T W R, 3:00 – 3:50 PM., WS 1706
MA 111 – 2, M T W R, 2:00 – 2:50 PM., WS 3805
CALL NUMBER: 81295 (81296)
CREDITS: 4

INSTRUCTOR: Dr. Truong, Bao
NSF 1135

OFFICE HOURS: 10:00 – noon and 1:00 – 2:00 M T W R. Appointments must be made via email btruong@nmu.edu in advance; other hours available.

PREREQUISITES: MA 100 or satisfactory score on Math Placement Exam.

TEXT:

College Algebra

COURSE DESCRIPTION: This course involves the continued development of students' abilities to manipulate algebraic statements and solve problems. Topics, applications and pace are tailored for those students intending to take calculus.

Chapter 0: Prerequisites
Chapter 1: Equations and Inequalities
Chapter 2: Coordinates and Graphs
Chapter 3: Functions
Chapter 4: Polynomial and Rational Functions
Chapter 5: Exponential and Logarithmic functions
Chapter 6: Systems of Equations and Inequalities

This course satisfies the Foundation of Natural sciences/Mathematics requirement. Students who complete this course should be able to demonstrate a basic understanding of mathematical logic; use mathematics to solve scientific or mathematical problems in college classes; express relationships in the symbolic language of mathematics; and appreciate the role of mathematics in analyzing natural phenomena.
LEARNING OBJECTIVES: By the end of the course students will be able to:

- recognize and avoid common algebra mistakes.
- manipulate and work successfully with functions including polynomial, rational, exponential and logarithmic functions.
- understand the characteristics of various mathematical functions (linear, exponential, logarithmic, logistic, trigonometric, quadratic, power functions).
- sketch a graph of a function based on zeros and asymptotes.

Evaluation of these learning outcomes will be done through homework assignments, quizzes and exams.

HOMEWORK: In addition to ungraded assignments, there will be a sequence of graded submitted assignments posted on the EduCat™ at https://educat.nmu.edu/. Homework assignments are due in class on the day assigned. Failure to turn in the will result in a one-point reduction. One point will be subtracted for every day it is late.

Homework should be neatly handwritten or typed. Skip a line between each problem. Copy the problem in its original form from the book; this includes word problems.

Provide the solution to the problem. If you are having difficulty with a problem, make sure you get help before the due date. If you still can't complete the problem, do as much as you can, as you may receive partial credit.

Staple your pages together and cut off any messy edges. Failure to do so will result in a one-point reduction.

TESTS AND QUIZES: There will be a quiz or a test every Thursday. You will be expected to take all three tests. Only in the event of an unavoidable emergency will a make-up test be considered. Make-up tests will be more difficult than the original exam. You may drop the lowest quiz grade. If you are absent for a quiz, the missed quiz becomes your dropped grade.

FINAL EXAM: A comprehensive final exam will be given on

- **MA 111 – 1 Monday, December 9, 2:00 – 3:50**
- **MA 111 – 2 Wednesday, December 11, 2:00 – 3:50.**

GRADES:

<table>
<thead>
<tr>
<th>Weighted percentage:</th>
<th>Tests 40%</th>
<th>Quizzes 20%</th>
<th>Final 25%</th>
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<tbody>
<tr>
<td></td>
<td>HW &amp; Others 15%</td>
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Grading Scale (approximate)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>93% up</td>
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<tr>
<td>B +</td>
<td>87 – 89.9%</td>
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<tr>
<td>C +</td>
<td>77 – 79.9%</td>
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<tr>
<td>D +</td>
<td>67 – 69.9%</td>
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<td>F</td>
<td>below 60%</td>
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<tr>
<td>A –</td>
<td>90 – 92.9%</td>
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<td>B</td>
<td>83 – 86.9%</td>
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<td>C</td>
<td>73 – 76.9%</td>
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<td>D</td>
<td>60 – 66.9%</td>
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<tr>
<td>B –</td>
<td>80 – 82.9%</td>
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<tr>
<td>C –</td>
<td>70 – 72.9%</td>
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IMPORTANT DATES:
First official day of classes - Monday, August 26, 2013
Labor Day observance – no classes – Monday, September 2, 2013
Planning/Conference Day – no classes - Friday, October 11, 2013
Thanksgiving recess begins at 8:00 a.m. Wednesday, November 27, 2013
Classes resume December 2, 2013
Last day of classes - Saturday, December 7, 2013

Thursday, September 5 - Quiz 1
Thursday, September 12 - Quiz 2
Thursday, September 19 - Quiz 3

Thursday, September 26 – Test 1
Thursday, October 3 - Quiz 4
Thursday, October 10 - Quiz 5
Thursday, October 17 - Quiz 6

Thursday, October 24 – Test 2
Thursday, October 31 - Quiz 7
Thursday, November 7 - Quiz 8
Thursday, November 14 - Quiz 9

Thursday, November 21 – Test 3

EXTRA HELP:
• My office: during regular office hours or by appointments.
• Mathematics Tutor Lab: West Science 3810. Mathematics Tutor Lab is open M – R 9:00 am – 4:00 pm and F 9:00 am – 3:00 pm.
• All Campus Tutoring: Learning Resource Center 111H. All Campus Tutoring is open S – W 2:00 pm – 10:00 pm.
• Disability Service Office: If you have a need for disability-related accommodations or service, please inform the Coordinator of Disability Service in the Disability Service Office by either coming into the office at 2001 C.S. Hedgcock, or calling 227 – 1700, e-mailing disserv@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.

ATTENDANCE: Class attendance is mandatory. Although I do not have a rigid cut policy, I will take attendance most days, and anyone who has missed lots of classes and is doing poorly in the course should not expect much sympathy from me. If you do miss a class, it is your responsibility to make up the material and make sure your homework is turned in on time. For “Each day you miss, it takes one day longer to be good”.—Ben Hogan, Golfer
**CALCULATOR:** TI Interactive graphic software can be loaded to your ThinkPad for free at the Help Desk in LRC. Many of you have probably used graphing calculators in the past and you may already have your own calculator. If you have a graphing calculator, you should bring it to class since it is much more convenient than a laptop.

**CODE OF CONDUCT:** Since every student is entitled to full participation in class without interruption, all students are expected to be in class and prepared to begin on time. If for some emergency reason you are late, you must quietly enter the classroom and find a seat at the back row. All pagers, wireless phones or other devices that make noise must be turned off when you enter the classroom. Disruption of class, whether by talking, noisy devices, eating in class or other inconsiderate behavior, will not be tolerated. **Students who violate these rules will be asked to leave the classroom and will not be allowed to return until they have spoken privately with the instructor.**

**ADDITIONAL EXPECTATIONS:** Students will arrive for every class with necessary tools: text, notebook, pencil, and calculator. Cell phones and other electronic devices will be out of sight and on silent; speak to the professor if you anticipate receiving an emergency call during class.

Keeping up with the homework assignments is essential to learning Mathematics. No one is able to learn mathematics without working problems. You should expect to spend 8 – 12 hours a week working homework problems, reading the text, and going over your class notes. I urge you to work together in groups.

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Math is Not a Spectator Sport
Work to Understand the Principles
Mathematics is Cumulative

“A student who has merely done mathematical exercises but has never solved a mathematical problem may be likened to a person who has learned the moves of the chess pieces but has never played a game of chess. **The real thing in mathematics is to play the game.**”

Stephen J. Turner