Course: MA 100, 4 Credits,  
Term: Fall 2015  
Assistant Professor: Dr. Amy E. Barnsley  
E-Mail: abarnsle@nmu.edu. Expect no more than 24 hour response time, except on weekends.  
Office Phone: 227-1608 (better to email)  
Office Hours & Location: Jamrich Room 2210, Mon, Tues, Thur 11 am – 1pm. Other times by arrangement.  
Required Supplies: Aleks 360 access code, 18 weeks Higher Education, ebook included,  
Optional Textbook: Beginning and Intermediate Algebra, 4e, Miller, O’Neill, Hyde  
Websites for this class:  
Educat: educat.nmu.edu Course documents, gradebook, discussion forums  
Aleks: www.aleks.com Homework, computation quizzes, practice exams, exams, ebook  
Instructor website: http://www.amybarnsleymath.wordpress.com Math content  

Course Description: The study of polynomials, graphing, algebraic fractions, radicals, lines and linear equations and inequalities, quadratic and exponential equations and systems of equations. Applications are emphasized.  

Course Goals and Purpose: This course aims to help students build a secure foundation in algebra skills through meaningful contextual problems and situations and to develop skills that will help students succeed in a college level math class.  

Student Learning Outcomes for Intermediate Algebra:  
POLYNOMIALS AND FACTORING  
Perform operations and factor polynomial expressions  
Factor sum and difference of cubes  
Factor quadratic equations when leading coefficient is not 1  
RATIONAL AND RADICAL EXPRESSIONS AND EQUATIONS  
Evaluate, perform operations and simplify rational expressions  
Evaluate, perform operations and simplify radical expressions  
Solve equations with rational expressions  
Solve radical equations  
Apply complex numbers  
LINEAR EQUATIONS AND INEQUALITIES  
Apply concepts of sets (unions, intersections, interval notation, set notation, Venn diagrams)  
Solve and graph linear absolute value equations  
Solve systems of linear equations  
Solve and graph linear inequalities  
QUADRATIC EQUATIONS AND FUNCTIONS  
Solve quadratic equations by factoring  
Solve quadratic equations by completing the square  
Solve quadratic equations by quadratic formula  
Solve quadratic equations by square root method  
Graph and interpret quadratic functions
Graph and interpret linear functions
Graph and interpret square root functions
Graph and interpret absolute value functions

APPLICATIONS
Solve applied problems. To include, but not limited to; joint and combined variation, quadratic applications, basic geometry and basic exponential problems.

Prerequisites: Passing grade in MA 090 or satisfactory score on math placement exam.

Technical skills: Student must be able to navigate websites including Educat, Aleks and the instructor’s website. They must use and check their @nmu.edu email daily.

Technology requirements: Computer with internet access, graphing calculator or equivalent computer software

Grades: Grades are based on the following scale

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>B</td>
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<tr>
<td>70-79%</td>
<td>C</td>
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<tr>
<td>60-69%</td>
<td>D</td>
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<tr>
<td>0-59%</td>
<td>F</td>
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Your grade has the following components:

- Portfolio: 5%
- Aleks Homework: 10%
- Quizzes: 10%
- Practice Exams (4): 5%
- Exams (4): 40%
- Final Exam: 30%
- Extra Credit Aleks Pie: 5%

Portfolio: Organized notebook with your work. See grading rubric.

Aleks Homework: Homework is done in Aleks. You have unlimited attempts until the due date and time. The Aleks program will not allow you to work beyond the due date and time.

Quizzes: Paper and pencil, done in class.

Practice Exams: Take in Aleks program (one attempt). Show work for every problem on your own paper. Number every problem, and keep your work tidy, put in your portfolio.

Exams and Final exam: Paper and pencil, done in class.

For written work (Practice exams, exams, and final exams) you are graded not only on correctness, but also on clarity of work. If I can’t read your writing, then a correct answer will not get you full credit. You must show all steps. Just giving the answer will not earn full credit. Again, you must show all work. Word problems can often be solve by just “thinking” about it. In this class you must use algebra and show all work to earn credit.

Late submission policy: No late work will be accepted.
Math Tutoring Room: Extra help is available for free. Tutors are available Monday-Friday 9 am-4 pm to help with questions in West Science Room 3810. Study groups with classmates are encouraged.

Disability needs: 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 (227-1700). 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

Academic Integrity: Students are expected to do their own work and follow the university academic honesty policy. This policy can be found in the student handbook. See link here: http://www.nmu.edu/dso/studenthandbook

Important dates:

Drop: Last day to drop a class with no course record is September 1, 5pm. Drop procedure: http://www.nmu.edu/records/adddropprocedure

Withdrawals: Last day for course withdrawal is October 30, 5pm. I will recommend withdrawal for any student earning below 60%. A W grade and an 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. Withdrawal procedure: http://www.nmu.edu/records/node/19

Final exam: Given in regular classroom:
9 am class: 12/10, 8 am – 9:50 am
10 am class: 12/9, 10am- 11:50 am
2pm class: 12/9, 2pm- 3:50 pm