Course: MA 090, 4 Credits  
Term: Fall 2014  
Section 02: Located in WS3602  
Assistant Professor: Dr. Amy E. Barnsley  
E-Mail: abarnsle@nmu.edu  
Office Phone: 227-1608 (better to email)  
Office Hours & Location: Jamrich Room 2210, Monday, Wednesday, and Thursday 10am-12 noon. Other times by arrangement.  
Optional online homework www.aleks.com  
Course Code HLVVX-3QKUG  
Financial Aid Access Code is: 49D67-AFC2E-AE8BA-13C30

EduCat: Course materials (syllabus, calendar, your grades etc) will be available on EduCat. You must be able to receive emails sent to your university generated email.

Course Description: The study of the fundamental operations of algebra with a problem solving emphasis. The course includes graphing, linear equations, exponents, and introductory probability and statistics.

Course Goals: 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 Beginning Algebra:

**INTEGERS AND RATIONAL NUMBERS**
1. Use order of operations to simplify and perform operations on algebraic expressions
2. Evaluate algebraic expressions
3. Determine ratios and unit rates
4. Convert between and solve problems involving fractions, decimals and percents

**LINEAR EQUATIONS AND INEQUALITIES**
5. Solve linear equations in one variable
6. Graph and interpret linear equations
7. Determine equations of lines
8. Solve and graph linear inequalities in one variable
9. Graph linear inequalities in two variables

**PROBABILITY AND STATISTICS**
10. Solve problems involving basic probability
11. Present and evaluate data using various graphical methods
12. Find mean, median, and mode of a data set

**EXPONENTS AND RADICALS**
13. Apply exponent rules to integers and algebraic expressions
14. Perform operations on numbers using scientific notation
15. Solve basic exponential equations using formulas, graphs and guess-and-check methods
16. Convert between radical and exponential notation
17. Simplify radical numbers and basic expressions
18. Use Pythagorean Theorem to solve problems

**FUNCTIONS (AS TIME ALLOWS)**
19. Apply basic function concepts (notation, evaluating, domain, range, etc)
20. Recognize and evaluate linear, quadratic, and exponential functions

**APPLICATIONS**
21. Solve applied problems from all areas
**Instructional Methods:** The format of the class will involve lecture, strategies for problem solving, small group work and practice on daily homework and demonstration of learning homework, quizzes and exams. Online homework is highly suggested for this class.

**Prerequisites:** OC 080 (B- or better) or satisfactory score on the math placement exam.

**Grades:** Grades are based on the following scale:

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<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tr>
<td>90-100%</td>
<td>A</td>
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<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:** 125 points
- **Homework:** 100 points
- **Quizzes:** 280 points
- **Practice Exams:** 120 points
- **Exams (5):** 500 points
- **Final Exams:** 300 points

Even though this sums to 1425 your grade will be calculated by the total number of points divided by 1350. That means you get 75 points for “free”. No make-up quizzes or late homework will accepted. Not for any reason, included sickness, car accident etc. That’s what the “free” points are for.

- **Portfolio:** Use a 3 ring binder or some other organizer. These will be graded on exam days. Portfolio should have at least the following notes, homework, quizzes and exams. See grading rubric.

- **Homework:** Can be completed with paper and pencil from the book or with an optional online homework program called ALEKs. Aleks costs about $80. No late homework will be accepted. See “free” points note above.

- **Quizzes:** Weekly quizzes will be given on Friday. These will occasionally involve group problem solving. Quizzes must be taken in class on Friday and cannot be made up. See “free” points note above.

- **Practice Exams:** Practice exams will be available on EduCat or Aleks. They can be done in small groups. Some class time will be given. They are due the day before a test.

- **Exams:** Exams will be paper and pencil. As a policy, exams cannot be retaken. An exam will be considered to be taken if you have started it. Exams cannot be missed except in extreme cases. The final exam is comprehensive.

Keep all graded work until you get your final grade. If you believe homework, quiz or exam was graded incorrectly please bring your concern forward immediately; but absolutely before the final exam.

There can be “technical” glitches which cause you to be unable to login to your homework. Do not leave your homework until the last minute. It is your responsibility to do on-line homework by the time it is due. Unless technical glitches are incurred by all members of the class they will not excuse a homework.

For written work 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.

**Final Exam:** Tuesday, December 9, 8:00 – 9:50 am.

**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.

**Teaching Assistant (TA):** Molly Smith molsmith@nmu.edu
Audits: A student who audits this course must attend class regularly. An auditing student does not need to take the exams but must turn in all homework and quizzes. A student cannot change this course to an audit if a homework or a quiz is missing.

Drop: September 2: Last day to drop a class for a 100% refund and no grade.

Withdrawals: October 31: Last day for course withdrawal. I will recommend or do a faculty-initiated 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.

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.

Big Tip: Always come to class. Never be late. You are responsible for all material presented in class, even at times when you are absent.

Class Etiquette: Students who participate in this class in an adequate fashion have good attendance and are in the classroom at the start of the class. They stay until the end of class. They have a good record of turning in homework. They do not disturb those around them (whispering, leaving to get food, eating during class, etc). Those students that participate in a substantial fashion are attentive and discuss ideas in a reasonable and polite fashion. Please turn off all beeping devices (cell phones, watches) before the start of each class. Absolutely no cell phones or headphones are allowed in class during tests, quizzes or lectures. If I see or hear your cell phone you will be asked to leave class for the day.

DEVELOPMENTAL MATHEMATICS LAB SESSION/TUTORING POLICY:
Students are required to meet with a Teaching Assistant (TA) for one hour per week any time in which the student’s grade on a test is below 70%. Students must continue to do this until they achieve at least 70% on a subsequent test. It is the student’s responsibility to learn if he or she is required to continue attending after the next test is taken. Students should ask the instructor if they are uncertain. Do not make any assumptions about your attendance status. All students, even if they score at least 70% on a test, are welcome to work with the tutors and TAs. Students will be asked to initial a sign-in sheet to indicate their presence. A student who misses a session or arrives more than 10 minutes late will be marked absent. No more than four (4) unexcused absences from the required lab session or meeting with the TA will be permitted. Students who exceed the number of unexcused absences will be required to meet with the instructor to discuss their commitment to the course. The instructor reserves the right to reduce a student's grade due to an excessive number of absences or to give the student a failing grade in the course. Students may also choose to withdraw from the course prior to the University's class withdrawal deadline.