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| The New 3Rs | R e s p e c t , R e s p o n s i b i l i t y , R e a l i t y | M C C Monroe Community College |
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ELEMENTARY ALGEBRA MTH 098025 – Computer - FALL 2008

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| Instructor: | Brigitte Martineau |
| Office: | Building 8, Room 546 |
| Office Hours: | T: 12:30 to 2:00 R: 12:30:00 to 3:00 F: 10:00 to 11:00 or by appointment |
| Phone Number: | 292-2967: Leave a message with your course and section number as well as a phone number where you can be reached. |
| Email: | bmartineau@monroecc.edu |

Class schedule

- MTH 098-025 meets on Tuesday and Thursday from 11:00 to 12:20 in 11-202 and on Friday from 11:00 to 11:50 in 11-202

Required Material

- Introductory Algebra, Third Edition, by K. Elayn Martin-Gay. (recommended)
- MyMathLab access codes (required)
 - If you buy a new book, the software should be packaged together
 - If you buy a used book, the software can be bought separately at the bookstore or online as long as you have a valid credit card.
- A scientific calculator. No graphing calculator, programmable calculator, cell phone or any other devices allowed during test. (required)
- A note book (required)

Respect for self and others in words and deeds

Responsibility for one's own success through personal accountability

Reality of the expectations and standards in a college environment

Course Description

A first course in algebra. Topics include, but are not limited to, solving linear equations and inequalities, arithmetic operations on polynomials, factoring polynomials, introduction to rational and quadratic equations, simplifying expressions containing integer exponents, introduction to radicals and rational expressions, graphing linear equations, solving systems of two linear equations, and appropriate applications of these topics. In addition to regular homework assignments, student will be required to spend an average of one hour each week outside of class time on a supplemental learning activity as determined by the instructors (worksheets, computer software or other media). Four class hours per week; four fee hours; four imputed credits; no earned credits.

BE AWARE THAT THERE WILL BE NO LECTURE IN THIS CLASS. MATERIAL IS PRESENTED USING THE MYMATHLAB (COURSE COMPASS) SOFTWARE.

Prerequisite

TRS 094 with a grade of C or better, or MCC Level 4 (formerly Tier 2) Mathematics Placement. Prerequisite will be checked for each single student. If you think you do not have the prerequisite for this class, please stop by after the first class. MTH 098 is a developmental course. It does not fulfill a mathematics requirement for an Associate in Arts or Associate in Science Degree.

Attendance

Attendance will be taken during each non-exam class meeting. Arriving late or leaving early may count as an absence. In other words, if you are not present at the moment I am taking attendance, you will earn half an absence. Any student with more than six absences and an average lower than 80% may result in being withdrawn from the course. On the other hand, if your average at the beginning of class is 80% or above, you will not be counted absent if you are not in class. Keep in mind that I assign zeros for quizzes and homework a few minutes before class starts. If you stop showing up, **it is your responsibility to initiate the withdrawal process**. Failure to do so may result in a grade of F. If you have to miss a class, make sure you cover the necessary material and notify me as soon as possible. I will not tolerate students interrupting classes for material or questions because they have missed the previous lesson. Please come to see me BEFORE class starts.

Grading Scheme

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|-------------------|-----|
| Homework | 15% |
| Quizzes | 15% |
| 5 tests (5 * 10%) | 50% |
| Final | 20% |

Final Letter Grades

| <u>Average</u> | <u>Grade</u> | <u>Average</u> | <u>Grade</u> |
|----------------|--------------|----------------|--------------|
| 93-100 | A | 73-76 | C |
| 90-92 | A- | 70-72 | C- |
| 87-89 | B+ | 67-69 | D+ |
| 83-86 | B | 63-66 | D |
| 80-82 | B- | 60-62 | D- |
| 77-79 | C+ | Below 60 | F |

Quizzes (5th hour requirement)

The 5th hour requirement will be fulfilled using online quizzes within MyMathLab. Quizzes will regularly be assigned and due just before class starts. Late quizzes will not be accepted and will be given a grade of zero. Quizzes must be done on your own (outside class time) and will be worth 15% of your final grade.

Homework

Regular homework assignments will be assigned online. **Keeping up with homework is essential in learning.** As in a regular classroom, when you are in class you should concentrate on the material assigned for that day and later on, at home or at any other location, concentrate on your homework. Questions about homework will be answered at the beginning of class. If you have questions while you do your online homework you can either print the questions you struggled with and bring them to class or send me an email and I'll make sure to either reply to you personally or to answer your question in class the next day.

IMPORTANT NOTE

Since homework assignments and quizzes will be done online you will need access to a computer either at home or at MCC. Being away for the week-end and not having a computer handy is NOT an acceptable excuse for late homework and quizzes. Also, computer glitches and problems are NOT acceptable excuses for missing deadline. Homework and quizzes will be due at 10:45 am on their specific due date (see MML) just before class starts.

Exams

There will be five tests and a comprehensive departmental final. Tests will be written and done in class. **Make-up test will be given only in cases deemed excusable by the instructor as long as the student has contacted me prior to the test date.** Please notify ASAP. There is no more than one make-up test per student per semester. Written documents may be necessary. Failing to show up on the final exam will result in a course grade of F. You must pass the final to earn a grade of C or better.

Additional Help

Monroe Community College has a number of Learning Centers at Brighton (for example, Accounting, Math, Psychology, Writing, the Electronic Learning Center, etc.) and at Damon (for example, the Integrated Learning Center, Electronic Learning Center, etc.). Learning centers are staffed with instructional personnel and may be equipped with computers and software to assist students. It is recommended that students use the Learning Centers to get additional help with concepts learned in the classroom and with their homework. Please complete Part A of the Learning Center Referral form attached to this Course Information Sheet and return the form to your instructor.

In particular, mathematics students are referred to the Robert A. Fratangelo Mathematics Learning Center (RAFMLC) in 11-204 and 11-206 for the following reasons:

- To receive tutoring from qualified faculty tutors.
- To use student solutions manuals, study guides, and other reference materials on reserve for use in the MLC.
- To view videotapes and software available for additional help in mathematic courses.

YOU WILL NEED YOUR MCC ID CARD AT ANY TIME TO USE THESE SERVICES

Hours of operations are as follows:

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|------------------------|---------------|
| Monday and Tuesday | 8 am to 8 pm |
| Wednesday and Thursday | 8 am to 9 pm |
| Friday | 8 am to 3 pm |
| Saturday | 11 am to 6 pm |

Conduct Policy

The obstruction and/or disruption of the classroom instructional environment are unacceptable. Should this occur, a course of action, as outlined in the Catalog and Student Handbook will be followed. When using computers to complete various requirements of this course, you are required to comply with all aspects of the Code of Conduct for Users of College Computer System, as described in the Catalog and Student Handbook.

All pagers and cell phones must be turned off during class. The first time your cell phone rings during class you will get a warning. At your second offense, you will be asked to leave the class immediately. You will also be marked absent for that day.

Neither audio nor video recordings of the instructor or the class can be made without the explicit prior written permission of the instructor.

Honesty

Academic honesty is assumed. Cases of cheating and/or plagiarism as defined in the college's Catalog and Student Handbook are unacceptable. Should this occur, a course of action, as outlined in the Catalog and Student Handbook will be followed.

Services for Students with Disabilities

MCC provides a mainstreamed learning environment for students who identify themselves with physical, mental, and learning disabilities. Students must be able to function independently and are responsible for informing the college of their needs. Please refer to MCC's 2007/2008 Catalog & Student Handbook for information about the following: qualifying for service; services available; arranging or services; when to request services; and cost of services.

Emergency Closings

If the College is closed due to inclement weather or some other emergency, all Rochester area radio and television stations will be notified no later than 5:30 a.m. In addition, the homepage on the MCC website (www.monroecc.edu) will display a message indicating the College is closed. Please do not call the College to avoid overloading the telephone lines.

Class cancellation

Information is available daily on the web or through the telephone. Simply go to the MCC website (www.monroecc.edu) and under the "Quick Links" window on the homepage, click on "Class Cancellations". Additionally, class information is available by dialing 292-2066, press "1" for the Brighton Campus and "2" for the Damon Campus. If possible, please use the web as there could be delays in the voice recordings based on the number of cancellations

Important Dates

- September 22, 2007 Last day to drop the course
- November 22, 2007 Last day to withdraw the course with a grade of "W"
- November 27 -30, 2007 THANKSGIVING RECESS – No classes
- December 12, 2007 Last day of classes
- December 13 – 18, 2007 Final exam will be schedule during that week.
NO EARLY DEPARTURE ALLOWED.

Email

Feel free to send me emails at bmartineau@monroecc.edu at any time for any type of questions. I will do my best to answer back to you in a timely manner. When setting up your MyMathLab (MML) account, you will need an email address. Please use an email address that you will check regularly as this address will be my main course of communication. NOT CHECKING OR READING EMAILS WILL NOT BE A VALID EXCUSE FOR MISSED DEADLINES. If you do not have an email address, set up your MCC student email account. See me for more information.

Please use complete sentences, proper grammar and syntax when emailing your instructor. Also, remember to sign your emails with your full name as I do not know who is lforgottosignmyname@yahoo.com ☺. Emails that do reflect these basic rules will not be answered.

Tentative Schedule

| Plan | | MTH 098 025 | | | FALL 08 | |
|------|----------------------|-------------|---------------------------------|---|---------------------------------|-----------------------------|
| Week | Date on TUESDAY | M | TUESDAY | W | THURSDAY | FRIDAY |
| 1 | 09/02/08 | | Intro – R2 | | 1.2 – 1.3 | 1.4 |
| 2 | 09/09/08 | | 1.5 – 1.6 – 1.7 | | 1.8 – Review | TEST on R2 and Ch. 1 |
| 3 | 09/16/08 | | 2.1 – 2.2 | | 2.2 – 2.3 | 2.4 |
| 4 | 09/23/08 | | 2.5 – 2.6 | | 2.6 – 2.7 | 3.1 |
| 5 | 09/30/08 | | 3.2 – 3.3 | | 3.4 – 3.5 | 3.6 |
| 6 | 10/07/08 | | 3.7 – Review | | Review TEST Ch. 2 - 3 | 4.1 |
| 7 | 10/14/08 | | 4.2 | | 4.4 | 4.5 Review 4.1 – 4.5 |
| 8 | 10/21/08 | | 4.6 | | 4.7 | 5.1 |
| 9 | 10/28/08 | | 5.2 – 5.3 | | 5.3 – 5.4 | TEST Ch. 4 |
| 10 | 11/04/08 | | 5.5 | | 5.6 | 6.1 – 6.2 |
| 11 | 11/11/08 | | 6.2 – 6.3 | | 6.4 – 6.5 | 6.5 - Review |
| 12 | 11/18/08 | | Review TEST Ch. 5 - 6 | | 7.1 - 7.2 | 7.2 – 7.3 |
| 13 | 11/25/08 | | 7.3 – 7.4 | | THANKSGIVING BREAK | |
| 14 | 12/02/08 | | 8.1 – 8.2 | | 8.2 – 8.6 | Geometry |
| 15 | 12/09/08 | | Review TEST ch. 7 – 8 | | Final Review | Final Review |
| | 12/13/08 12/18/08 | | FINAL EXAM WEEK | | | |

All policies and deadlines are subject to any change throughout the semester. If so, changes will be announced in class ahead of time and/or by email communication.

MTH 098 ELEMENTARY ALGEBRA (revised 01/07)

Students will be required to spend one additional hour each week on a supplemental learning activity determined by instructor.

Creating open expressions and using those expressions to write equations involving one or two variables to solve problems and applications will be integrated throughout this course (especially in * topics). Examples from other disciplines will be incorporated whenever possible. A comprehensive departmental final exam testing the degree of mastery of the following course objectives is required.

1. Sets of Numbers

1.1 Classify a given real number as being a counting or natural number, whole number, integer, rational or irrational number.

2. Properties of Real Numbers

2.1 Identify and be able to use the Commutative, Associative, Distributive, Identity, and Inverse Properties.

3. Operations on Real Numbers

3.1 Review arithmetic operations on integers.

3.2 Review arithmetic operations on rational numbers.

3.3 Evaluate a given expression by applying the correct priority of operations.

***4. Equation Solving Techniques**

4.1 Solve first degree equations in one variable.

4.2 Solve literal equations and formulas for a single variable.

4.3 Solve quadratic equations by factoring.

4.4 Solve proportions.

4.5 Solve rational equations with monomial denominators.

5. Polynomials

5.1 Define and identify polynomials and their degree.

5.2 Add and subtract polynomials.

5.3 Multiply a monomial by a monomial.

5.4 Multiply a polynomial by a monomial.

5.5 Multiply a binomial by a binomial.

5.6 Divide a polynomial by a monomial.

6. Factoring

6.1 Factor a monomial GCF from a polynomial.

6.2 Factor a polynomial containing four terms by grouping.

6.3 Factor the difference of two squares.

6.4 Factor trinomials of the form $x^2 + bx + c$.

6.5 Factor trinomials of the form $ax^2 + bx + c$, where a is a nonzero integer using either the “ac factoring by grouping method” or the “trial and error method.”

7. Rational Expressions

7.1 Simplify rational expressions.

7.2 Multiply and divide rational expressions.

7.3 Add and subtract rational expressions with like denominators.

7.4 Add and subtract rational expressions with unlike monomial denominators.

***8. Inequalities in One Variable**

8.1 Solve a linear inequality in one variable.

8.2 Express the solution to a linear inequality using interval notation.

8.3 Graph the solution to a linear inequality on the real number line.

***9. Absolute Value**

9.1 Use the concept of absolute value as distance from zero on the real number line to determine the absolute value of real numbers.

***10. The Cartesian Coordinate System**

10.1 Use the Cartesian coordinate system to describe the x - and y -axes, the origin and quadrants, and determine the positions of ordered pairs.

10.2 Graph linear equations in two variables by plotting points.

10.3 Determine the x - and y -intercepts and use them to graph a linear equation.

10.4 Understand the concept of the slope of a line and use the slope formula to determine the slope of the line through two given points.

10.5 Determine the slopes of horizontal, vertical, parallel and perpendicular lines.

10.6 Graph linear equations in two variables by the slope-intercept method.

10.7 Determine the equation of a line in slope-intercept form:

- Given the slope and the y -intercept
- Given a graph with integer x - and y -intercepts.

10.8 Given two points in the coordinate plane, calculate the distance between them using the distance formula.

10.9 Find the midpoint of the line segment joining two points in the coordinate plane using the midpoint formula.

***11. Systems of Equations**

11.1 Solve a system of linear equations in two variables graphically.

11.2 Solve a system of linear equations in two variables algebraically.

12. Exponents and Radicals

12.1 Simplify exponential expressions with integer exponents.

12.2 Simplify radical expressions whose radicands are perfect squares or perfect cubes.

12.3 Simplify square root radical expressions whose radicands are not perfect squares.

***13. Geometry**

13.1 Review area and perimeter of triangles, squares, and rectangles.

13.2 Review radius, diameter, circumference and area of circles.

13.3 Review complementary, supplementary and vertical angles.

13.4 Review sum of angles of triangles and angles of parallelograms.

13.5 Review the use of the Pythagorean Theorem.

13.6 Review using proportions to solve problems involving similar triangles.

13.7 Identify the alternate interior angles, alternate exterior angles and corresponding angles formed when two parallel lines are cut by a transversal.

13.8 Find unknown angle measures using alternate interior angles, alternate exterior angles and corresponding angles formed when two parallel lines are cut by a transversal.