

MTH 108 – Modeling and Applications
3 Credits
(Subject to change)

Instructor: Susan Hertzler
E-Mail: shertzl@lps.org
Home Ph: 483.4606
Cell Ph: 560.8560
Work Ph: 436.1301 (Lincoln High School) Call only to leave a message

Course Description – The following topics will be covered in this course: Rational expressions, exponents, factoring, equations, inequalities, and functions.

Prerequisites – Enrollees must either pass the math competency test or pass MTH 090 with a “C-“ or better or meet the competency requirement through established college guidelines.

Who should take this course – This course satisfies the Doane Plan requirement. This course is a prerequisite for MTH 115 / Finite Math, required for Business and Accounting majors and suggested for ISM majors. Any student wanting to learn more mathematics is invited to take this class.

Text: Intermediate Algebra: A Text/Workbook, 7th Edition
Charles P. McKeague
Thompson Publishing
ISBN: 0-495-10899-5

A student solutions manual is available, but **not required.

Goals

1. To review and master mathematical skills involving real numbers, order, absolute value, polynomials, and linear equations.
2. To further develop an understanding and working knowledge of factoring, the rectangular coordinate system, linear relations, and parabolas.
3. To introduce and provide a knowledge base of rational expressions, rational exponents, radicals, complex numbers, quadratic equations, inequalities, symmetry, functions and their combinations, and linear systems of equations in two and three variables.
4. To provide the algebraic background necessary for taking MTH 115 / Finite Math.
5. To develop problem solving skills in a mathematical setting.

Class Agenda

1. The first 20 minutes will be used for asking questions of the previous week's material.
2. A closed book quiz will be administered.
3. New material will be discussed.

Course Schedule

1st Session – Introductions
Discussion of course objectives / requirements
Discussion of new material

2nd Session – Q & A session
Quiz #1
Discussion of new material

3rd Session – Q & A session
Quiz #2
Discussion of new material

4th Session – Q & A session
Quiz #3
Discussion of new material

5th Session – Q & A session
Quiz #4
Discussion of new material
Take Home Test #1 – Handed out

6th Session – Q & A session
Collect Take Home Test #1
Quiz #5
Discussion of new material

7th Session – Q & A session
Quiz #6
Discussion of new material

8th Session – Q & A session
Quiz #7
Discussion of new material
Take Home Test #2 – Handed out (Due 7 days after Session #8)

Evaluation

Your grade will be based on the following percentage scale:

A+	98-100	C+	77-79
A	94-97	C	73-76
A-	90-93	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62

Grade Composition: 60% 2 Take Home Tests
 40% 7 Closed Book Quizzes

Homework – Suggested problem sets will be handed out at each session. These will not be collected for a grade but you are highly encouraged to complete all problems.

Course Policies

It is very important that you attend all classes. In the event that you should have to miss a session, you will be responsible for getting the notes from another person in class and be ready to take the next quiz.

If an emergency should arise and you need to miss class, please email me, phone my home number, Doane College or my work number and leave a message. The next day call me at home to make arrangements for making up any missed work.

***ANY STUDENT MISSING 2 OR MORE CLASSES WILL EARN AN F FOR THE COURSE.**

The Doane College Academic Policy will be adhered to in this class. All tests, quizzes should be done without the assistance from outside sources. Any violation of these policies can result in the loss of points for that particular assignment.