

**MATH 125**  
***Intermediate Algebra***  
Fall 2013

**Instructor:** Perry McDonnell  
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**Class Schedule:**

MW 7:15 – 9:50pm in MSA109

Office hours are MW 6:40 – 7:10pm in MSB common room (2<sup>nd</sup> floor)

**Required Textbook:** The required textbook for this course is *Intermediate Algebra*, by Lial, Hornsby, and McGinnis, 11<sup>th</sup> Ed.. The ISBN is either 0-321-71541-1 or 978-0-321-71541-8.

**Course Content:** During this course you will become more comfortable with ideas and problem solving in mathematics. You will learn how to take mathematics and apply it in a multitude of situations. We will thoroughly cover the standard curricula for Algebra II. Specifically,

**Course Objectives (as stated in the Course Outline of Record)**

1. Demonstrate facility with operations involving real and complex numbers, algebraic expressions, and functions
2. Use appropriate techniques to solve equations, including: linear, quadratic (or quadratic in form), exponential and logarithmic equations; equations involving rational or radical expressions or absolute value, and those involving factorable polynomials; and systems of linear and non-linear equations.
3. Use functions and systems of equations to model data and solve 'story' problems
4. Solve and graph linear and non-linear inequalities in one and two variables
5. Graph and analyze functions (linear, quadratic, rational, radical, exponential, logarithmic) and conic sections

6. Write, evaluate, and apply arithmetic and geometric sequences and series
7. Be prepared to succeed in a transfer-level mathematics course.

### Math Division Program SLOs

1. Apply quantitative thinking processes using basic mathematical operations (addition, subtraction, multiplication, division) to solve common academic, workplace, and family problems. (Theme: Quantitative thinking; mathematical operations)
2. Analyze and interpret spatial and graphic data (schedules, maps, and tables, graphs) to plan and organize daily routines. (Theme: spatial and graphic data).
3. Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)
4. Apply advanced mathematical concepts and tools (algebra, calculus) essential in upper division academic work and/or workplace tasks. (Theme: advanced mathematical operations—algebra, calculus)
5. Select appropriate math strategies for solving and handling real life problems involving finance, economics, and family issues. (Theme: mathematical problem-solving)

### COURSE SLOs:

- 1) Select and use appropriate algebraic techniques to solve a wide variety of equations and systems of equations
- 2) Analyze, model, and solve application problems including those involving variation
- 3) Construct and analyze graphs of functions, inequalities, and conic sections

**Homework:** Homework will be assigned weekly and collected on the first day that we meet the following week. You will have until the end of that week to turn in your homework. No late homework will be accepted after that. Homework will be assigned

from the book.

**Grading:** Your grade will be determined by your performance on homework (10% of grade), three midterms (worth 20% apiece) and a final (worth 30%). The first midterm will be Wednesday, September 18th, the second midterm will be Wednesday, October 16th, and the third will be on Wednesday, November 13th. The final will be Wednesday, December 11th, 7:15 – 9:50pm. Your attendance and participation are expected at every class session. Missing four class sessions may cost you a letter grade on your final grade for the semester. Make-ups for exams will not be permitted.

**Grade Scale:**

90-100%	is an A
80-89%	is a B
70-79%	is a C
60-69%	is a D,
below 60%	is an F.

**Calculator:** You will want to have either a scientific calculator or a TI83/84 level calculator for this class. Calculators are allowed on all exams.

**Classroom Policies:**

I will keep my cell phone off during class and I expect the same courtesy from you. This also holds for beepers, pagers, and any other electronic devices. Permission to use the restroom need not be asked for. Just go ahead but please be respectful of the instructor and your classmates. I scan the classroom regularly so if questions arise please gently get my attention when I finish my current thought. Generally just use your own common sense and be respectful of your surroundings, I will do the same.

**Academic Honesty:** Complete honesty is expected at all times. Any dishonesty will be taken seriously by me, the department and the College. Please refer to the Student Handbook if you need further information. I encourage cooperative work on homework assignments because one of the best ways to learn mathematics (besides practicing) is to teach others. I expect individual homework solutions, however, to be written individually. Sharing on exams of any form is prohibited. This includes information, stories, calculators, notes, etc. Please do not hesitate to see or contact me if you have any questions or concerns.

**Academic Freedom:** Students and faculty both have a constitutionally protected right of freedom of expression. Please see your Student Handbook if you have any questions or concerns about this right.

**Learning Disabilities:** Any student with a documented learning disability has the right to certain considerations and privacy. Please again consult the Student Handbook for more information, or see the Disabled Students Office.

Math 125 Homework Schedule  
 [for *Intermediate Algebra*, by Lial, Hornsby, and McGinnis, 11<sup>th</sup> ed.)

Week	HOMEWORK
1	2.1 #11 – 43 ODD, 2.5 #9 – 33 ODD, 2.7 #67 – 101 ODD , 3.1 #35 – 55 ODD, 3.2 #45 – 65 ODD,
2	3.3 #45 – 65 ODD ,3.3 #67 – 73 ODD, , 3.4 #7 – 37 ODD
3	3.5 #9 – 53 EOO, 3.6 #25 – 53 EOO , 4.1 #21 – 69 EOO, 4.2 #5 -41 EOO, 4.3 #13 – 45 EOO
4	REVIEW AND EXAM 1
5	5.1 #65 – 161 EOO, 5.2 #45 – 85 EOO, 5.3 #13 – 49 EOO, 5.4 #13 – 93 EOO, 5.5 #9 – 49 EOO
6	6.1 #9 – 57 EOO, 6.2 #9 – 61 EOO, 6.3 #9 – 77 EOO, 6.4 #9 – 69 EOO, 6.5 #9 – 61 EOO
7	7.1 #25 – 93 EOO, 7.2 #49 – 89 EOO, 7.3 #5 – 27 ODD, 7.4 #1 – 45 EOO, 7.5 #9 – 61 EOO
8	REVIEW AND EXAM 2
9	7.6 #21 – 57 EOO, 8.1 #1 – 65 EOO, 8.2 #13 – 101 EOO, 8.3 #17 – 93 EOO, 8.4 #1 – 53 EOO
10	8.5 #29 – 105 EOO, 8.6 #17 – 61 EOO, 8.7 #17 – 81 EOO, 9.1 #13 – 81 EOO, 9.2 #9 – 45 ODD
11	9.3 #21 – 81 EOO, 9.4 #9 – 49 EOO, 9.5 #21 – 35 ODD, 9.6 #23 – 43 ODD, 9.7 #5 – 47 ODD
12	REVIEW AND EXAM 3
13	10.1 #9 – 19 ODD, 10.2 #5 – 25 ODD, 10.3 #5 – 45 EOO, 10.4 #21 – 49 EOO, 10.5 #21 – 45 EOO
14	10.6 #1 – 57 EOO, 11.1 #9 – 37 EOO, 11.2 #5 – 37 EOO,
15	11.3 #1 – 33 EOO, 11.4 #13 – 37 EOO , 11.5 #9 – 31 ODD, 12.4 #1 – 41 ODD
16	FINAL REVIEW , FINAL EXAM