

Math 125 – College Algebra #3051

Instructor: Beth Powell

Friday 1 – 3:50 Room 3517

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Office: 1214/ office hours by appt.

**Prerequisite:** The prerequisite for Math 125 is completion of Math 64 with a grade of “C” or better, or a qualifying score on the Math Competency Exam (MCE).

**Course Description:** This course combines advanced algebra topics and a review of techniques for solving algebraic equations and inequalities to gain a deeper understanding of these topics and techniques as well as to utilize them in advanced application problems. Topics include linear, quadratic, polynomial, exponential, and logarithmic functions and their applications, graphs of functions, inverse functions, and systems of equations and inequalities

**Course Objectives:**

- 1). Solve first- and second-degree equations and inequalities
- 2). Sketch the graph of a linear, quadratic, polynomial, or rational function
- 3). Analyze a given function, find the domain of a given function, and perform operations on functions
- 4). Solve a given exponential or logarithmic equation using the appropriate properties of exponents and logarithms
- 5). Solve a system of equations graphically and algebraically
- 6). Find the zeros of a given polynomial function.

**Student Learning Outcomes:**

- 1). Students will be able to sketch graphs of many different types of functions, utilizing mathematical reasoning and careful analysis.
- 2). Students will be able to solve several types of equations by recognizing and applying appropriate mathematical strategies to find solutions.

3). Students will be able to recognize a system of equations and apply mathematical reasoning to solve these systems both graphically and algebraically, communicating their thought processes in logical and understandable ways.

**Grading:** Your course grade will be based on the following:

Homework (Guided Notebook/MML assignments) :	15%
Classwork (problem solving):	15%
3 Chapter Tests:	45%
1 Cumulative final exam (with emphasis on Ch. 5):	25%

**Textbook:** College Algebra, by Trigsted – MyMathLab e-textbook. To access the textbook, you must register with MyMathLab using the information found at

<http://www.miracosta.edu/home/bpowell/regm125f13.pdf>

More information about registering with MyMathLab can be found here:

<http://pearsonmylabandmastering.com/students/>

*Note that you must purchase the online materials to do the work in this class.*

**Time Commitment:** Expect to spend between 9 – 12 hours per week on this class. Three hours are spent in the classroom and the rest will be spent doing the activities in MyMathLab and studying/practicing for exams.

**MyMathLab activities:** The activities in MyMathLab replace the traditional class lecture. You will use modern technology to get acquainted with the material in the textbook, practice a few examples, and take lecture notes through the guided notebook. The guided notebooks will be checked

each Friday in class for completeness and the online Practice Problems will be scored for accuracy.

**Classwork:** The classwork will replace the traditional homework. You will come to class prepared to problem solve and learn to work the more difficult problems while you have the instructor and your classmates nearby to ask questions. Some problems will be done on your own and others will be done in groups, but you will be able to ask questions as you work through the problems. These problems will be graded each week.

**Studying outside of class:** Please note, although we are flipping the classroom, you will still need to set aside time each week to study for exams.

**Accommodation of Disability:** Students with verified disabilities who need academic accommodations should discuss options with me during the first two weeks of class. Please contact me and/or the Disabled Students Program and Services (DSP&S) Office for further information.

**Academic Integrity and Classroom Behavior:** This class will be conducted in accordance with MiraCosta College's policy on "Rights and Responsibilities of Students and Staff Members," and basic standards of academic honesty. Cheating, plagiarism, or other forms of academic dishonesty are not acceptable and will not be tolerated. Students are expected to respect and obey standards of student conduct while in class, or on the campus. Charges of misconduct and disciplinary sanctions may be imposed upon those who violate these standards of conduct, or provisions of college regulations.

\*\*\* Cellular-Phone and Pager Use Policy \*\*\*:

- If you carry a "pager" and/or a cell phone, turn them/it OFF, or set them/it to "Vibrating Mode" while in class.
- Please be courteous toward your fellow students as you would want the same courtesy offered to you. Emergency situations can happen, so if you

must take a phone call, please discretely leave the room. Please realize that if you leave the room to accept a text or phone call during the test, you must turn your test in before taking the call and you will not be able to complete it afterward.

**Drops:** If you decide to drop the course, you must do it yourself by logging into SURF and dropping this class before the last date to drop as designated by Admissions and Records. Don't wait for me to drop you automatically.

**Good luck, enjoy the course, and have a great semester!**

**Course Outline:** (Problem Set = PS, this is work we'll do in class) Topics in the Due After Class column will be handouts that I give you during class to help when studying for the exams.

DATE	Due before Class	Classwork	Due after Class
8/23		Procedures/review	Int. Alg. Rev quiz
8/30	MML 2.1 – 2.3	PS 2.1 – 2.3	Worksheet
9/6	MML 2.4, 7.1	PS Ch. 2, 7.1	
9/13	MML 7.2 – 7.3	PS Ch. 7	Test 1 Review
9/20	MML 3.1	Test 1 (ch2,7) PS 3.1	
9/27	MML 3.2 – 3.3	PS 3.1 – 3.3	
10/4	MML 3.4 – 3.5	PS 3.4 – 3.5	Worksheet
10/11	MML 3.6, 4.1	PS 3.6, 4.1	Test 2 Review
10/18	MML 4.2	Test 2 (Ch3) PS4.2	
10/25	MML 4.3 – 4.4	PS 4.3 – 4.4	Worksheet
11/1	MML 4.5 – 5.6	PS 4.5 – 4.6	
11/8	MML 4.7 – 5.1	PS 4.7 – 5.1	Test 3 Review
11/15	MML 5.2	Test 3 PS 5.2	
11/22	MML 5.3 – 5.4	PS 5.3 – 5.4	Worksheet
11/29		Thanksgiving	Thanksgiving
12/6	MML 5.5	PS 5.5	Final Review
12/13		Final Exam	