

<b>Instructor:</b>	Carlos Sotuyo	<b>Ref #:</b>	2721
<b>Office:</b>	3348	<b>Term:</b>	Summer 2019 June 24-August 2
<b>Email:</b>	csotuyo@mdc.edu	<b>Department Phone:</b>	305-237-2431
<b>Day/Time:</b>	Mo-We-Fr 1:00 pm – 3:15 pm	<b>Room:</b>	3333

Office Hours						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
11:50am- 12:50pm Room 3348		11:50am- 12:50pm Room 3348				

**Course Description:** \_\_\_\_\_

This course introduces the student to the concept of functions and their graphs. Students will learn to graph linear, quadratic, rational, exponential, logarithmic, radical, power, and absolute value functions and their transformations. Students will perform operations on functions and compositions of functions, find the inverse of a function, apply the laws of logarithms to simplify expressions and solve equations, graph non-linear inequalities, and solve related applications and modeling problems. ( 3 hr. lecture )

Prerequisite: MAT1033

**Text:** \_\_\_\_\_

College Algebra, 10<sup>th</sup> edition by Michael Sullivan

**Homework:** \_\_\_\_\_

Pearson online @ [www.pearson.com/mylab](http://www.pearson.com/mylab) Course ID: sotuyo50794. Enrollment **deadline:** Jul 1, 2019.

**Attendance:** \_\_\_\_\_

Attendance will be taken during each class period. Students who miss three or more classes may be withdrawn from the course. If you expect to miss a class or have missed a class for a valid reason, email your instructor.

**Classroom Decorum:**

In order to optimize your learning experience, classroom interruption must be kept to a minimum. Please make every effort to arrive on time and avoid causing an interruption if you need to leave early. Please turn your cell phone to a silent mode and avoid using it during class. In an emergency, you may excuse yourself and leave the classroom.

**Registration and Withdrawal:**

It is the students' responsibility to make sure they are registered for the course, and not dropped due to late payments or any other circumstances that may have come up. It is also the students' responsibility to drop the course before the drop deadline if they feel they will not be able to complete the course.

**Academic Dishonesty Policy:**

If a student is caught cheating, that student will automatically fail the assignment, and will be referred to the dean. For additional information on academic dishonesty policies, please refer to the [Student's Rights and Responsibilities Handbook](#).

**Grading Policy:**

The grade for this course will be based on homework and four equally weighted exams. The average of your homework will count for 10% of your grade and the average of the exams will count for 90% of your grade. There will be an optional final, which if taken will replace your lowest test score. If you miss an exam, the final will count as the makeup for that exam. You can use the following formula to calculate your grade in the course:

$$Grade = .90 \left( \frac{T_1 + T_2 + T_3 + T_4}{4} \right) + .10(HW)$$

**Your final grade will be distributed according to the following scale:**

Average of 90-100%	A
Average of 80-89%	B
Average of 70-79%	C
Average of 60-69%	D
Average below 60%	F

Tentative Schedule: Schedule may be changed at the professor's discretion.

Day	DATES	Topic	Section
1	6/24	Introduction to the Course	
		Complex Numbers	1.3
		Quadratic Equations	1.2
		Applications of Quadratic Formula	1.2
2	6/26	Solving Radical Equations	1.4
		Solving Equations Quadratic in Form	1.4
		Absolute Value Equations and Inequalities	1.6
3	6/28	Review	
4	7/01	<b>Test 1</b>	
5	7/03	Functions (Definition and Domain)	3.1
		Functions (Notation and Difference of Quotient)	3.1
		The Graph of a Function	3.2
		Properties of Function	3.3
		Library of Functions and Piecewise Functions	3.4
		Graphing Techniques (Translations)	3.5
		Composite Functions	6.1
		One to One Functions and Inverse	6.2
6	7/05	Review	
7	7/08	<b>Test 2</b>	
8	7/10	Quadratic Functions and their Properties	4.3
		Inequalities Involving Quadratic Functions	4.5
		Properties of Rational Functions	5.2
		The Graph of a Rational Function	5.3
9	7/12	Polynomial and Rational Inequalities	5.4
		Systems of Linear Equations	8.1
		Systems of Linear Equations: Determinants	8.3
10	7/15	Review	
11	7/17	Test 3	
12	7/19	Exponential Functions	6.3
		Logarithmic Functions	6.4
		Properties of Logarithms	6.5
		Exponential Equations	6.6
		Logarithmic Equations	6.6
		Financial Models and Applications of Log and Exp. Equations	6.7/6.8
13	7/22	Review	
14	7/24	Test 4	
15	7/26	Review for Final exam	
16	8/03	Final Exam	

**Holidays: July 4<sup>th</sup>, Independence Day.**

**Last day to withdraw with 100% refund: June/26**

**Last day to withdraw with W: July/21**

**Final Exam: July/31**