**Instructor:** Dr. Gabriel Lugo

**Classes:** MAT 111-010 MW 3:30 - 4:45 OS 1009

MAT 111-011 MW 5:00 - 6:15 OS 1009

Office Hours: MW 2:00-3:30

Or by appointment

Email: lugo@uncw.edu

**Phone:** 910-962-3246

Office: Osprey Hall 2016B

Mailbox:

Course Overview: MAT 111 College Algebra is a 3 credit preparatory course for further mathematics in which students develop an understanding of algebraic concepts and learn how algebra can be used as a modeling language for real life problems. Students will solve equations and inequalities; understand basic functions and their graphs (linear, quadratic, polynomial, rational, exponential, and logarithmic); use problem solving and mathematical modeling in applications to make connections to other fields of study; and integrate the graphing calculator in all course content. Satisfies University Studies I: Foundations/Mathematics and Statistics. Satisfies University Studies IV: Building Competencies/Quantitative and Logical Reasoning. Prerequisite: Satisfactory performance on the UNCW mathematics placement test (3 or higher) or MAT 105.

CHAPTER	TITLE	<b>SECTIONS</b>
1	Graphs, Equations, and Inequalities	1.1 – 1.7
2	Graphs	2.1 – 2.2
12	Systems of Equations and Inequalities	12.1
3	Functions and Their Graphs	3.1 - 3.5
4	Linear and Quadratic Functions	4.1 – 4.5
5	Polynomial and Rational Functions	5.1, 5.4 – 5.6
6	<b>Exponential and Logarithmic Functions</b>	6.1 – 6.9

### **Course Student Learning Outcomes:** Upon completing MAT 111, students should be able to:

- find and use graphical, numerical, analytical and verbal representations of functions and their inverses. (MS 1; QRE 1)
- understand the meaning and use of polynomial, rational, exponential, and logarithmic functions. (MS 1 & 2; QRE 1 & 2)
- solve equations, inequalities and systems of equations. (MS 1; QRE 1 & 2)
- use correct mathematical syntax to explain solutions in both written and graphic forms.
   (MS 3; QRE 3)
- model a variety of applications using the concepts of algebra. (MS 2 & 3; QRE 1, 2 & 3)
- use technology to help solve problems, interpret results, and verify and communicate conclusions. (MS 1 & 2 & 3; QRE 1 & 2)
- determine the reasonableness of solutions, including sign, size, relative accuracy, and units of measurement. (MS 2 & 3; QRE 1, 2 & 3)

# Course Materials and Grading

#### **Course Materials:**

#### **REQUIRED**:

1. MYMATHLAB Access Code (Pearson Education, 2012) www.pearsonmylabandmastering.com

www.pearsonmylabandmastering.com

2. Graphing calculator (TI-84)



### **OPTIONAL**:

Textbook: <u>Algebra and Trigonometry: Enhanced with Graphing Utilities</u>, 6<sup>th</sup> ed. by Sullivan and Sullivan (Pearson Education, 2012)

 Students are NOT required to get a hard copy of the textbook. The textbook and student solutions manual can be viewed online through MYMATHLAB.

**Grading:** Course grades will be determined using the following criteria:

Assignments	Points	Percentage	
Graded Assignments (Online Homework/ Group Activities/ Quizzes)	100	16.6%	I will drop the lowest 3 grades. No make-ups!!!
Test 1	100		
Test 2	100	50%	
Test 3	100		
Final Exam	200	33.3%	Common Final for all M111 sections
Final Grade: $\frac{Total P}{600}$		%	

Grading Scale					
Final grades will be rounded to the nearest whole number and assigned using the following scale					
92 - 100 = A	88 - 89 = B +	78 – 79 = C +	68 - 69 = D +	0 - 59 = F	
90 - 91 = A -	82 - 87 = B	72 – 77 = C	62 - 67 = D		
	80 - 81 = B -	70 - 71 = C -	60 - 61 = D -		

# **Course Components**

#### **MYMATHLAB:**

MYMATHLAB is the online component for MAT 111. I will use MYMATHLAB to post lecture outlines, grades, announcements, test resources, and other course materials. You will use MYMATHLAB to complete all graded homework assignments. Lecture outlines will be available for you to print in MYMATHLAB. You are expected to check your UNCW email and MYMATHLAB regularly for the most up-to-date information.

#### **Graded Assignments:**

You will have an <u>online homework</u> assignment in MYMATHLAB for every section we complete from the textbook. You will also have graded in-class assignments in the form of <u>group activities</u> and <u>quizzes</u>. The group activities will be designed to give you the opportunity to work collaboratively with your classmates to practice some of the methods covered in this course. Quizzes will be individual assessments composed of questions related to your homework problems and material covered in class. In general, homework assignments will be due by 11:59 p.m. and group activities and quizzes will be due in class. (See the course schedule for official due dates). Online homework, group activities, and quizzes will comprise 100 points of your total score. Students who attend class regularly and keep up with the pace of the course generally do not have difficulty completing the graded assignments.

#### **Exams:**

We will have three tests (100 points each) over the course of the semester that will account for 300 of the total 600 points possible. All students taking MAT 111 take a common final exam created by the MAT 111 faculty. Your final exam is scheduled from 7:00-10:00 p.m. on Monday December 7th. Your final exam is comprehensive and is worth 200 points of your final score. Samples of previous final exams and other math resources can be accessed on the University Learning Center website: http://uncw.edu/ulc/math/resources.html.

Review sessions will be held before each test and the final exam. See the Test Review Schedule Handout for official dates and times.

## **Course Policies**

**Grading/ Make-up Policy: No MAKE-UPS, No EXCEPTIONS**. You will receive a 0 for any online homework that is not submitted by the due date. You will not be allowed to make-up any graded assignment that you miss in class. I will not accept late work!!! However, I will drop your lowest 3 graded assignments at the end of the semester. If you miss one exam because of extenuating circumstances with verifiable evidence (ie: doctor's notice, etc.) you will be assigned for that exam a score equal to one half of your score in the final exam. I you miss additional exams, you score will be 0 for those exams.

Attendance Policy: Regular attendance is expected and will be monitored. If you are absent, it is your responsibility to learn all material covered and to find out what you missed in class that day. You should get any notes you miss from a classmate and then see me or visit the mathlab if you have any questions. You are still responsible for keeping up with the online homework assignments, and you will not receive credit for any graded assignment that you miss due to an absence. Attendance does not directly count toward your final grade; however, students who have poor attendance in my course usually have lower grades. Do not miss class in test days!!

**Academic Honor Code:** All members of UNCW's community are expected to follow the academic Honor Code. Academic dishonesty will **NOT** be tolerated in this class in **ANY** form. We will adhere to the policies and procedures as stated in the UNCW Student Academic Honor Code, which can be found in the UNCW Student Handbook and available here: <a href="http://www.uncw.edu/odos/honorcode/">http://www.uncw.edu/odos/honorcode/</a>.

Cell phones, Laptops, iPads, etc: Please silence your cell phone and do not make calls, access applications, or text during class. I expect you to be an ACTIVE LEARNER in class, and this is not possible if your attention is not on the course material. If you have a personal, urgent matter for which you need to use your phone, please leave the classroom. In addition, please limit computer use to what is relevant for class. If I notice you texting or using your computer for activity outside of our coursework, I will give you a verbal warning. On your second offense, I will ask you to leave the class and you will not be allowed to make-up any graded assignment you miss for the remaining class period.

## Resources

UNCW Math Lab: Free drop-in tutoring, computers, and access to textbooks are available at the Math Lab, which is located in the University Learning Center on the first floor of DePaolo Hall (DE 1056). http://uncw.edu/ulc/math/index.html

	Sunday	2:00 p.m 9:00 p.m.
Fall and Spring:	Monday - Thursday	9:00 a.m 9:00 p.m.
	Friday	9:00 a.m 2:00 p.m.
	7	
Summer:	Monday-Thursday	9:00 a.m 4:00 p.m.
		'
Reading Day and Exam Week Hours:	Monday-Friday	9:00 a.m 5:00 p.m.
	Monday-Friday	9:00 a.m 5:00 p.m.
	Monday-Friday  Monday-Thursday	9:00 a.m 5:00 p.m. 9:00 a.m 5:00 p.m.

**Student Disabilities**: The Office of Disability Services (Depaolo Hall, First Floor) has been designed by the university to guide, counsel, and assist students with disabilities <a href="http://www.uncw.edu/disability/">http://www.uncw.edu/disability/</a>. To obtain accommodations, the student should contact Disability Services (910-962-7555) and present appropriate documentation to the coordinator for review and verification. If you require accommodations for this class, please bring me a copy of your accommodation letter and schedule an appointment with me to discuss your approved accommodation needs. If you require accommodation for test-taking, please make sure I have the referral letter no less than three days before the test.

**UNCW Statement on Diversity:** As an institution of higher learning, the University of North Carolina Wilmington represents a rich diversity of human beings among its faculty, staff, and students and is committed to maintaining a campus environment that values that diversity. Accordingly, the university supports policies, curricula, and co-curricular activities that encourage understanding of and appreciation for all members of its community and will not tolerate any harassment or disrespect for persons because of race, gender, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, political affiliation, marital status, or relationship to other university constituents.

**Zero Tolerance Policy:** UNCW practices a zero tolerance policy for violence and harassment of any kind. For emergencies contact UNCW CARE at 910-962-2273; Campus Police at 910-962-2222; or Wilmington Police at 911. For University or community resources visit: <a href="http://uncw.edu/emergencyandsafety/">http://uncw.edu/emergencyandsafety/</a>; <a href="http://uncw.edu/emergencyandsafety/"