MTH 127 Sec 109
Fall 2016

Course Title/Number	College Algebra MTH 127 Sec 109
Semester/Year	Fall 2016
Days/Time	MW 5-5:50pm; TR 5-6:15
Location	SH 513
Instructor	Dr. Michael Otunuga
Office	WAEC 3229
Office Hours	Monday, Tuesday, Wednesday, Thursday from 10:00am to 12:00pm
Phone	304 696-3049
E-Mail	otunuga@marshall.edu
Text	College Algebra, 2nd edition by Paul Sisson.
Calculator	Graphing calculator is required for the course
Homework	Homework will be assigned on WeBWorK. Go to http://webwork.marshall.edu/webwork2 and click "F16-Math-127-130-Otunuga". Login using your Marshall username (lowercase) and passwords
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment See the University Academic Calendar (http://www.marshall.edu/calendar/academic/) for course withdrawal dates.

Course Description

A brief but careful review of the main techniques of algebra. Polynomial, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences. (PR: ACT Math 19 or ACT Math 20 or MTH099 or MTH102 or MTH 102B)

How each student learning outcome will be practiced and assessed in the course

MTH 127 Student Learning Outcomes	How students will practice each outcome in MTH 127	How student achievement of each outcome will be assessed in MTH 127
Students will employ quantitative methods to solve problems drawn from basic algebra and geometry.	Students will attend class, work on homework, participate in class discussions, and ask questions.	Students will take quizzes after completing homework assignments.
Students will demonstrate the ability to work with functions symbolically, visually, and numerically.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapter 2	Students will take quizzes after completing homework assignments.
Students will identify and implement appropriate solution methods for single-variable equations	Students will attend class, work on homework, participate in class discussions, and ask questions.	Students will take quizzes after completing homework assignments.
Students will identify and graph standard algebraic functions	Students will attend class, work on homework, participate in class discussions, and ask questions.	Students will take quizzes after completing homework assignments.
Students will interpret graphs of functions	Students will attend class, work on homework, participate in class discussions, and ask questions.	Students will take quizzes after completing homework assignments.
Students will construct functions to model applications	Students will attend class, work on homework, participate in class discussions, and ask questions.	Students will take quizzes after completing homework assignments.
Students will communicate written mathematics using appropriate notation and explanation in English	Students will attend class, work on homework, participate in class discussions, and ask questions.	Students will take quizzes after completing homework assignments.

Grading Policy

Attendance:	50pts		
Homework:	100pts	**Scale**	
Exam 1:	100pts (9/15/2016)	90.00 – 100%	A
Exam 2:	100pts (10/19/2016)	80.00 – 89.99%	B
Exam 3:	100pts (12/1/2016)	70.00 – 79.99%	C
Final:	150pts	60.00 – 69.99%	D
		Below 60.00%	F
Total:	**600pts**		

Attendance Policy

Students are expected to attend each class. **UNEXCUSED** absences from **five** classes will result in a reduction of one letter grade for the semester; unexcused absences from **six or more** classes will result in an F. To obtain an excused absence, please go to the Dean of Students' Office in MSC. Students **must** notify the instructor by phone or e-mail **prior to** an exam if they cannot take a scheduled exam. Students must present a valid reason for missing any exam. Makeup exams will be given to students outside of class time at the convenience of the instructor.

Tentative Course Schedule (Subject to change)

Week 1	8/22/16	1.2 Pg 16-18, 2.1
	8/23/16	Order of operations for real numbers, constants verses variables, identifying like terms, absolute value (including solutions for abs(x) = 6) -- all examples solving linear equations, if possible
	8/24/16	2.1, 1.1 Pg 6-8
	8/25/16	2.2, zero factor property in 1.2, 1.5
Week 2	8/29/16	1.5, 2.3
	8/30/16	factoring trinomials
	8/31/16	2.3
	9/1/16	practice solving quadratics by factoring and quadratic equation
Week 3	9/5/16	No class-Labor Day
	9/6/16	Review finding LCM, simplifying and combining rational expressions
	9/7/16	2.4/2.5
	9/8/16	Review 1.4
Week 4	9/12/16	2.5/2.6
	9/13/16	practice solving radical equations
	9/14/16	2.6/Review for Test 1
	9/15/16	Test 1
Week 5	9/19/16	3.1, 3.2
	9/20/16	practice graphing by plotting points, practice finding x and y intercepts of lines, identify horizontal and vertical lines
	9/21/16	3.3
	9/22/16	practice 3.3, foreshadow parallel and perpendicular lines, 3.4, 3.5
Week 6	9/26/16	3.6
	9/27/16	practice 3.5, 3.6
	9/28/16	4.1
	9/29/16	simplify and evaluate algebraic expressions, practice with function notation
	10/3/16	4.2

Week 7	10/4/16	graph lines and parabolas by plotting points, identify x and y intercept and vertex
	10/5/16	4.2, 4.3
	10/6/16	practice 4.3, foreshadow 4.4
Week 8	10/10/16	4.4
	10/11/16	practice 4.4
	10/12/16	4.5
	10/13/16	find formula for inverse (without using this terminology - solve for one variable in terms of the other), 4.6
Week 9	10/17/16	Review for Test 2
	10/18/16	Review for Test 2
	10/19/16	Test 2
	10/20/16	evaluate algebraic expressions, factor polynomials, practice with common functions, 5.1
Week 10	10/24/16	5.2
	10/25/16	practice 5.2, foreshadow 5.3
	10/26/16	5.3
	10/27/16	practice with common functions, write polynomial with given zeros, 5.4
Week 11	10/31/16	6.1
	11/1/16	domain of rational expressions, degree of polynomials, polynomial division, determine x and y intercepts of rational functions
	11/2/16	6.1
	11/3/16	Review 1.3, 1.4
Week 12	11/7/16	7.1
	11/8/16	practice 7.1
	11/9/16	7.2
	11/10/16	linear, quadratic, exponential word problems, 7.3
Week 13	11/14/16	7.4
	11/15/16	practice properties of logarithms
	11/16/16	7.4
	11/17/16	linear, quadratic, exponential, logarithm word problems, 7.5
Week 14	11/28/16	7.5
	11/29/16	practice 7.5
	11/30/16	Review for Test 3
	12/1/16	Test 3
Week 15	12/5/16	8.1
	12/6/16	practice 8.1
	12/7/16	8.1
	12/8/16	Review for Final Exam