# Marshall University

Course Title/Number	MTH 127-204 CRN 4026		
Semester/Year	SPRING 2016		
Days/Time	MTWRF 11:00 – 11:50 a.m.		
Location	SH 513		
Instructor	Ms. Melinda Bierhals		
Office	Smith Music 115		
Phone	304-696-3986		
E-Mail	bierhals@marshall.edu		
Office Hours	Wednesday 3:00-4:00pm		
University Policies	By enrolling in this course, you agree to the University Policies listed below.		
	Please read the full text of each policy by going to		
	www.marshall.edu/academic-affairs and clicking on "Marshall University		
	Policies." Or, you can access the policies directly by going to		
	www.marshall.edu/academic-affairs/policies/. 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		

# **Course Description: From Catalog**

A brief but careful review of the main techniques of algebra. Polynomial, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences.

# The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.

Course Student Learning Outcomes	How students will practice each outcome in this Course	How student achievement of each outcome will be assessed in this Course
Students will employ quantitative and analytical methods to solve problems drawn from basic algebra and geometry.	Students will attend class, complete homework, participate in class discussions, and ask questions.	Problem of the Day, examinations, and final examination.
Students will solve real-world problems using techniques that employ method of variation.	Students will attend class, complete homework, participate in class discussions, and ask questions.	Problem of the Day, examinations, and final examination.

Students will use symmetry and transformations to create and analyze new functions and their graphs.	Students will attend class, complete homework, participate in class discussions, and ask questions.	Problem of the Day, examinations, and final examination.
Students will analyze and compare basic algebraic functions as well as exponential and logarithmic functions.	Students will attend class, complete homework, participate in class discussions, and ask questions.	Problem of the Day, examinations, and final examination.
Students will construct, evaluate, and graph functions to apply in real-word problems.	Students will attend class, complete homework, participate in class discussions, and ask questions.	Problem of the Day, examinations, and final examination.
Students will demonstrate the ability to work with equations and inequalities symbolically, visually, and numerically.	Students will attend class, complete homework, participate in class discussions, and ask questions.	Problem of the Day, examinations, and final examination.
Students will apply techniques of systems of linear equations to solve real world applications.	Students will attend class, complete homework, participate in class discussions, and ask questions.	Problem of the Day, examinations, and final examination.

# Required Texts, Additional Reading, and Other Materials

1. College Algebra, 9<sup>th</sup> edition by Larson

2. A Graphing calculator is REQUIRED. Part of each test will be calculator allowed. NO computers or IPads, phones, etc allowed on tests.

# **Course Requirements/Due Dates**

1. A Graphing calculator is REQUIRED. Part of each test will be calculator allowed. NO computers or IPads, phones, etc allowed on tests.

2. Final exam will be on Tuesday, May 3<sup>rd</sup> from 10:15 to 12:15 in SH 513

### **Grading Policy**

- 1. Tests: 50% There will be 5 tests throughout the semester.
- 2. Final Exam: 25% The final exam is comprehensive.
- 3. Homework: 10% Grade received for completion of all assigned problems.
- 4. Problem of the Day: 15%. Graded for accuracy/correctness.

Final exam will be on Tuesday, May 3<sup>rd</sup> from 10:15 to 12:15 in SH 513.

#### Attendance Policy

For this course students are allowed up to 6 UNEXCUSED absences. Any UNEXCUSED absences past the sixth will result in a grade of F for the course. An unexcused absence will result in any tests/homework collected on that day being given a grade of zero. If you are tardy to class on test day, no extra time will be given to finish the exam. If you are tardy to class and miss the problem of the day this will result in a zero for this assignment on that day. If you leave class early and miss the problem of the day this will result in a zero for this assignment on that day.

### **Course Topics**

- 1. Equations, inequalities and modeling
- 2. Functions and their graphs
- **3.** Polynomial functions
- 4. Rational functions
- 5. Exponential and logarithmic functions
- 6. Systems of equations and inequalities