Marshall University course Syllabus

Course Title/Number	MTH 130 – College Algebra – Sec 105– CRN 3223 – (3 credits)
Semester/Year	Fall 2014
Days/Time	TR: 8:00 – 9:15
Location	Smith 516
Instructor	Dr. Ari Aluthge (Pronounced: A-luth-gay)
Office	Morrow Library, Room 109
Phone	(304) 696 3050
E-Mail	aluthge@marshall.edu (include your name and "MTH 130 – 105" in the subject line)
Office/Hours	Monday and Wednesday: 1:00 PM to 4:00 PM or by appointment
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

Course Description: From Catalog

Polynomial, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences. PR: ACT Math 21 or SAT Math 500. *3 hours*

Objectives of the Course*:*
1. To prepare (along with trigonometry) students for a course in calculus.
2. To prepare students for science and engineering courses.
3. To give students a solid understanding of algebra and how it is used.
4. To develop facility in using graphing calculators to solve math problems.
5. To satisfy the mathematics general education requirement.

Course Contents: Chapters R, 1, 2, 3, 4, 5, 6, and 8 (sections 8.1 and 8.2) in the textbook.
- Basic Concepts of Algebra
- Equations and Inequalities
- Graphs and Functions
- Polynomial and Rational Functions
- Exponential and Logarithmic Functions
- Systems of Linear Equations

Learner Outcomes: The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course. Upon completion of this course, students will have an understanding of the concepts of basic functions, equations, and their applications to solve real world applications. In particular,

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, work on worksheets and homework, participate in class discussions, and ask questions.	In class worksheets (daily), board work, weekly online quizzes, two exams, and the comprehensive final exam.
Students will solve real-world problems using techniques that employ systems of linear equation or method of variation.	Students will attend class, work on worksheets and homework, participate in class discussions, and ask questions.	In class worksheets (daily), board work, weekly online quizzes, two exams, and the comprehensive final exam.
Students will use symmetry and transformations to create and analyze new functions and their graphs.	Students will attend class, work on worksheets and homework, participate in class discussions, and ask questions.	In class worksheets (daily), board work, weekly online quizzes, two exams, and the comprehensive final exam.
Students will analyze and compare basic algebraic functions as well as exponential and logarithmic functions.	Students will attend class, work on worksheets and homework, participate in class discussions, and ask questions.	In class worksheets (daily), board work, weekly online quizzes, two exams, and the comprehensive final exam.
Students will construct, evaluate, and graph functions to apply in real-word problems.	Students will attend class, work on worksheets and homework, participate in class discussions, and ask questions.	In class worksheets (daily), board work, weekly online quizzes, two exams, and the comprehensive final exam.
Students will demonstrate the ability to work with equations and inequalities symbolically, visually, and numerically.	Students will attend class, work on worksheets and homework, participate in class discussions, and ask questions.	In class worksheets (daily), board work, weekly online quizzes, two exams, and the comprehensive final exam.
Students will apply techniques of systems of linear equations and matrices to solve real world applications.	Students will attend class, work on worksheets and homework, participate in class discussions, and ask questions.	In class worksheets (daily), board work, weekly online quizzes, two exams, and the comprehensive final exam.

Required Texts, Additional Reading, and Other Materials

1. Sullivan, College Algebra, 9th edition. ISBN: 9780321716811
2. A scientific calculator is required and a graphing calculator is recommended
3. Reliable access to internet. But students can use a campus computer lab to do their work.

Course Requirements / Due Dates

1. Daily attendance.
2. Daily worksheets completed in class and at home after the class.
3. Daily board work and class participation.
4. Weekly online quizzes completed outside class time.
5. Two tests on October 7 and November 20 during the class (75 minutes).
6. Comprehensive final exam on Thursday, December 11, 8:00 – 10:00 (2 hours), same classroom (Smith 516).

Grading Policy

1. Attendance = 50 points (2 points per day. Must be in the class for the whole period to earn full points)
2. Worksheets = 200 points
3. Boardwork and participation = 100 points
3. Weekly online quizzes = 150 points
4. Two tests = 300 points
5. Comprehensive final exam = 200 points
   Total = 1000 points
Letter Grades: A = 900 – 1000,   B = 800 – 899,   C = 700 – 799,   D = 600 – 699,   F = 0 - 599

Attendance Policy

Daily attendance is required will be counted towards the grade. Make-up exams will be given only for the absences approved by the dean of students. Students are expected to attend all scheduled classes. It is the student's responsibility to find out what was discussed in a missed class.

Tentative Weekly Schedule:

Week	Coverage of material and other assignments
Week #1 (8/25 – 8/29)	Sections R.1 – R.5
Week #2 (9/1 – 9/5)	Sections R.6 – 1.1
Week #3 (9/8 – 9/12)	Sections 1.2 – 1.5
Week #4 (9/15 – 9/19)	Sections 1.6 – 2.2
Week #5 (9/22 – 9/26)	Sections 2.3 – 3.1
Week #6 (9/29 – 10/3)	Sections 3.2 - 3.4, Review for Test 1
Week #7 (10/6 – 10/10)	Tuesday: Test 1 on (on R.1 – 3.4), Thursday: Sections 3.5 – 3.6
Week #8 (10/13 – 10/17)	Sections 3.6 – 4.2
Week #9 (10/20 – 10/24)	Sections 4.2 – 5.1 (skip 4.5)
Week #10 (10/27 – 10/31)	Sections 5.2 – 5.5 (skip 5.4)
Week #11 (11/3 – 11/7)	Sections 6.1 – 6.3
Week #12 (11/10 – 10/14)	Sections 6.4 – 6.6 (skip 6.7)
Week #13 (11/17 – 11/21)	Tuesday: Sections 6.8 and review for Test 2, Thursday: Test 2
Week #14 (11/24 – 11/28)	Thanksgiving break – No classes
Week #15 (12/1 – 12/5)	Sections 8.1 – 8.2, Review for the final exam
Week #16 (12/8 – 12/12)	Final Exam on Thursday, December 11, 8:00 – 10:00 in Smith 516

The class will be taught using PowerPoints which will be available on Blackboard (www.marshall.edu/muonline) for students to view before and after the class. Quizzes will also be on Blackboard. Students must log on to Blackboard on a daily basis. Students can contact the instructor using the "Internal Mail" tool on Blackboard.