Course Syllabus   MTH 130 Section 202   Spring 2018

Course Title:	College Algebra
Course Number:	MTH 130 -- Section 202 -- CRN 3929 -- Credit: 3 Hours
Textbook:	College Algebra, 2nd edition by Paul Sisson
Sections Covered:	1.1, 1.5,1.6, 2.1- 2.6, 3.1-3.4, 3.6, 4.1- 4.6, 5.1, 5.2, 5.4, 6.1, 7.1-7.5, 8.1
Course Description:	Basic Concepts of algebra; Equations and Inequalities; Graphs; Study of Functions and their Graphs; Linear and Quadratic Functions; Polynomial and Rational Functions; Exponential and Logarithmic Functions.
Calculator:	Any Scientific calculator (TI-30), graphing calculators will not be allowed in exams.
Prerequisites:	Math ACT of 21 or above, SAT 500
Meeting Time:	MWF: 11:00 – 11:50 AM
Classroom:	Smith Hall 509
Instructor:	Dr. Basant Karna
Office:	Smith Hall 715
Office Hours:	TR: 11:00-1:00 PM, W: 12:00-1:00 PM, others by appointment
Phone/Email:	Phone: (304) 696-4332, Email: karna@marshall.edu
Webpage:	http://www.science.marshall.edu/karna/
Course Objectives:	The students completing this course should be able to: - understand mathematical concept of a function. - sketch and interpret the graphs of elementary functions. - manipulate and solve polynomial, rational, exponential, and logarithmic equations. - apply to new situations in mathematics and daily life. The students will be ready for MTH 132.
Course Contents:	- Review - Equations and Inequalities - Functions and Their Graphs - Polynomial and Rational Functions - Exponential and Logarithmic Functions - System of Linear Equations
Attendance Policy:	Attendance is required and you must come with your text. Attendance will be taken every class day either by sign-in-sheet or by quiz. Having more than **25%** absences (excused or unexcused) may result in a course grade of **F**! Absences which can be excused include illness, emergencies, or participation in another university activity.
Grading Policy:	A. *Quizzes*: Throughout the semester, there will be 10 quizzes given during the last 15 minutes of the class on Fridays. Problems in quizzes will be given from assigned homework problems (textbook will not be allowed). B. *Exams:* There will be 2 exams given in class during the semester. C. *Homework Problems*: Homework problems will be assigned and collected. You are responsible for reading the text, working the exercises, coming to office hours for help when you're stuck, and being aware of the dates for the major exams. D. *Final Exam:* There will be a two-hour **common final** on April 28.

Points Distribution:	Attendance 50 Pts Homework Assignments 50 Pts Quizzes(10) 100 Pts 2 Major Exams 200 Pts Final Exam 100 Pts -- Total Pts: 500 Pts
Grades	The semester grade will be based on the percentage of the 500 total possible points, using the following scale. A: 90 -100 % , B: 80 - 89 %, C: 70 - 79 %, D: 60 - 69 %, F: 0 - 59 % Note: The class score will be posted on MUOnline.
Make-ups:	A. Quizzes: For unavoidable missed quizzes with valid documentation, I will give you make up quiz within a week of the original quiz date (up to two quizzes). B. *Exams*: Making up a missed exam is possible only if you receive prior permission from me and only for serious and unavoidable circumstances. Make-ups are likely to be more difficult than the original exam and must be taken within a week of the original exam date. You can't make up a make-up exam. C. *Final*: If you don't take final exam, you will receive "F" for the class.
Exam Dates:	Exam 1 – February 16, Exam 2 – April 6 (Fridays) **Common** Final Exam: **April 28 @ 2:00 PM** (Saturday)
Important Dates:	• January 15, Monday – MLK, Jr. Holiday – No Class • January 16, Tuesday – "W" Withdrawal period begins • March 16, Friday – Last day to drop • March 19, Monday – March 24, Saturday – Spring Break- No Class • April 27, Friday – Last class day
Disruptive Actions:	If your actions become disruptive or distracting for me or another student, you will be asked to cease your behavior. If you choose to continue, you will be asked to leave. Disruptive behavior may include, but are not limited to the following: cell phone use in class, talking during class, and the use of iPods or MP3 players during class. These will count as unexcused absences.
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 http://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
Disable Students:	Policy for Students with Disabilities: Marshall University is committed to equal opportunity education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disability Services (ODS) in Prichard Hall 117 (304.696.2467) to provide documentation of their disability. Following this, the ODS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experience, outside assignment, testing, and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, access the website for the Office of Disabled Student Services: http://www.marshall.edu/disabled.
Free Tutoring:	Free tutoring in Smith Music Hall 625 (10:00 - 4:00 PM, 5:00 - 6:30 PM from Monday to Thursday and 10:00 – 12:00 PM on Friday).
Coming Late:	Students should come on time and stay in the class for entire class. If you are late by more than 5 minutes, you will be considered to be absent.

Learner Outcomes: 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
Students will prepare for a course in calculus with analytic geometry.	Students will attend class, work on homework, participate in class discussions	Class work, weekly quizzes, two exams, and the final exam
Students will learn how mathematics is used in science and engineering courses.	Students will attend class, work on homework, participate in class discussions	Class work, weekly quizzes, two exams, and the final exam
Students will acquire a facility in using graphing calculators to solve mathematics problems.	Students will attend class, work on homework, participate in class discussions	Class work, weekly quizzes, two exams, and the final exam
Students will analyze basic concepts such as a function and learn to represent functions verbally, numerically, graphically, and algebraically.	Students will attend class, work on homework, participate in class discussions	Class work, weekly quizzes, two exams, and the final exam

Teaching Outline (Tentative)

Week	Sections Covered
1	1.1, 1.5, 1.6
2	2.1, 2.2, Quiz #1
3	2.3, 2.4, Quiz #2
4	2.5, 2.6, Quiz #3
5	3.1, 3.2, 3.3, Quiz #4
6	3.4, Review for Exam 1 **Exam 1 on February 16 (Sections 1.1-3.3)**
7	3.6, 4.1, Quiz #5
8	4.2, 4.3, Quiz #6
9	4.4, 4.5, Quiz #7
10	4.6, 5.1,Quiz #8
11	Spring Break: March 19, Monday – March 24, Saturday
12	5.2, 5.4
13	6.1, Review for Exam 2 **Exam 2 on April 6 (Sections 3.4-5.4)**
14	7.1, 7.2, Quiz #9
15	7.3 ,7.4, 7.5, Quiz #10
16	8.1, Review for Final Exam
17	**Final Exam: April 28 @ 2 PM**

Homework Problems

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Section 1.1: 27, 30, 32, **33**, **35**, 47, **51**, 57
Section 1.5: 3, **5**, 11, **17**, 21, **23**, 27, 31, **34**, 39, **41**, 45, 47, **49**, 51, 55, 57, **63**, 67-87 (**odd**)
Section 1.6: 1-29 (**Odd**), 31, **32**, 34, **39**, 42, **43**, 45
Section 2.1: 2, **4**, 7, **13**, 19, 23, **26**, 28, **32**, **38**, 44, **47**, **51**, 63
Section 2.2: 3, **5**, 7, **11**, 15, **23**, 27, 32, **34**, 40, 43
Section 2.3: 1, 3, **5**, 7, 11, **13**, 20, **25**, 29, **35**, 40, **45**, 47, **53**, 59

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Section 2.4: 1, **3**, 6, **9**, 13, **19**, 21, 22, **23**, 25, **28**, **34**, 37, **46**
Section 2.5: 1, **3**, 4, **5**, 10, **13**, 14, **15**, 17, **19**, **23**, **27**, 31, **33**, 37, **49**, 52, **55**
Section 2.6: 1, **2**, 3, **6**, **8**, 10, 18, **22**, **25**, 36, **39**, 44
Section 3.1: **7**, 27, **33**, **39**, 45, **52**, **55**, 59, **61**, 65
Section 3.2: 1, **3**, 5, **6**, 17, **25**, 28, **32**, 35, 37, **40-45**

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Section 3.3: 1, **3**, 8, **13**, 19, **21**, **25**, 29, **31**, 34, **37**, **41**, 43, 45, **49**, 51, 57, **60-65**, 66
Section 3.4: **1**, 3, 5, **7**, **11**, 12, **19**, 21, 24, **29**, 32, **35**, **39**, 42, 49, 50
Section 3.6: **1**, 3, **9**, **11**, **17**, 21, **25**, 27, **32**, 37, **40**, **45**
Section 4.1: 1, **4**, **9**, 12, 14, **17**, 18, **19**, 21, **29-32**, 33, **37**, 39, **43**, 47, 49, **51**, 57, **61**, **63**, **67**
Section 4.2: **1**, 4, 7, **16**, 18, **19**, 25, 31-38, 48, 57, 61

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Section 4.3: 1, **3**, 4, **7**, 19, **25**, **29**, 34, 37-44
Section 4.4: **1**, 2, **3**, 8, **9**, 11, **13**, 17, 20, 28, 36, **37**, 41, **43**, 46, 53, 61, **68**
Section 4.5: 1, **3**, 9, **11**, 15, 17, **23**, 25, **31**, 34, **37**, **42**, **44**, 46
Section 4.6: 1, **3**, 7, 13, 14, **17**, 21, **30**, **31**, 32, 41, **47**, 51
Section 5.1: 1, **5**, 8, **19**, **24**, 27, **29**, 30, 33, **36**, 38, **41**, **42**, **44**, **48**, **50-55**, **62**, 65, **67**, 73

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Section 5.2: **1**, 2, **7**, 13, **21**, **23**, 24, 26, 32, **38**, **41**, 44, **53**, 54, **57**, 59
Section 5.4: **1**, 2, **3**, 5, **7**, **9**, **12**, 13, **14**, 33, **34**, 39
Section 6.1: **1**, **3**, 4, **8**, 12, 19, **21**, 28, **37**, 39, **41**, 49, **50**, 52, **57**, 59
Section 7.1: **1**, **2**, **3**, 5, 12, **22**, 25, **27**, 31, **34**, 42, **48-57**
Section 7.2: **1**, **3**, 5, 9, **10**, **16**, 27
Section 7.3: **1**, **3**, 7, 11, **13**, 16, **23**, **25**, 31, **37-45**, **46-60**, **61**, 63, 66, **70**, 73, 79, **80**

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Section 7.4: **1**, 3, **7**, 11, **13**, 19, **21**, 25, 27, 31, 34, 38, **43**, 49, **50**, 54, **55**, 60, 70, 75, **79-84**
Section 7.5: 2, 4, **5**, 13, **19**, 28, **31**, 36, **42**, **44**, 47, 48, **51**
Section 8.1: **1**, 2, **3**, 6, **9**, 11, **16**, 19, 20, 28, **31**, 36

Turn in at least **boldface** problems.
Due dates are Mondays after the Sections are covered.