Math 091 Syllabus Spring 2014

Math 091 Intermediate Algebra Syllabus.
CRN: 20131
Instructor: Oscar J. Hernandez
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Text-Book: Introductory and Intermediate Algebra for College Students.
4th Edition
Author: Robert Blitzer

Office Hours : MWF 10:00 – 11:00
TR 15:00 – 15:30
Class day and Time:
T, TH 15:40 – 18:10

ROOM 2725

Credit Units: 5

COURSE/CATALOG DESCRIPTION:

A further study of the concepts of algebra. Topics covered include linear and quadratic equations, relations, functions and graphs,systems, logarithmic and exponential functions, conic sections, and sequences and series.

PREREQUISITES, if any:

1 MATH 081 with a minimum grade of C or better or
2 Appropriate placement

STUDENT LEARNING OUTCOMES:

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1 Solve quadratic equations by factoring, completing the square, and quadratic formula. (ILO2)
2 Solve equations involving radicals. (ILO2)
3 Recognize and graph equations of conic sections. (ILO2)
4 Solve an application involving exponential functions. (ILO2, ILO5)

MEASURABLE COURSE OBJECTIVES AND MINIMUM STANDARDS FOR GRADE OF "C":

Upon satisfactory completion of the course, students will be able to:

1. Demonstrate an understanding of radical expressions and equations.
2. Demonstrate and understanding of quadratic functions, including graphing and equations.
3. Demonstrate and understanding of functions and relations, including one to one functions.
4. Demonstrate and understanding of logarithmic and exponential functions and their graphs.
5. Classify and graph ellipses, parabolas, and hyperbolas.
6. Demonstrate an understanding of sequences and series and their operations.

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible.

DSP&S
Room 2117
Health Sciences Building
(760) 355-6312

Attendance Policy: Maximum number of absence allowed: **2**, being tardy or leaving early will count as half absence. The instructor can drop you from class if the number of absence exceeds the number allowed.

Grading: If the final exam score is greater than one of the tests, the lowest test score will be change with the final exam score.

Homework	100 points 15%
3 Tests	100 points each 60%
Final Exam	200 points 25%

After all of your scores have been totaled, final grades will be assigned as follows:

90 % - 100 %	**A**
80 % - 89 %	**B**
70 % - 79 %	**C**
60 % - 69 %	**D**
59% or less	**F**

Dropping: You may be dropped from this class if you miss the first day or if you miss three or more class sessions total. The last day to drop this class is April 11, 2014. After that date, I must give you a letter grade. It is your responsibility to drop, not mine.

Chapter 8 Jan 21-23

Basics of Functions

8.1 Introduction to Functions

8.2 Graphs of Functions

8.3 The Algebra of Functions

8.4 Composite and Inverse Functions

Chapter 9 Jan 28 to Feb 06

9.1 Reviewing Linear Inequalities

9.2 Compound Inequalities

9.3 Equations and Inequalities involving Absolute value.

9.4 Linear Inequalities in Two Variables

Test # 1 Chapters 8 and 9 on Feb 11

Chapter 10 Feb 13-27

Radicals, Radicals Functions, and Radical Exponents

10.1 Radical Expressions and Functions

10.2 Rational Exponents

10.3 Multiplying and Simplifying Radical Expressions

10.4 Adding, Subtracting, and Dividing Radical Expressions

10.5 Multiplying with More Than One Term and Rationalizing Denominators

10.6 Radical Equations

10.7 Complex Numbers

Chapter 11 March 04 - 13

Quadratic Equations and Functions

11.1 The Square Root Property, Completing the Square

11.2 The quadratic Formula

11.3 Quadratic Functions and Their Graphs

11.4 Equations Quadratic in Form

11.5 Polynomial and Rational Inequalities

Test # 2 Chap. 10 and 11 on March 18

Chapter 12 March 20-April 01

Exponentials and Logarithmic Functions

12.1 Exponentials Functions

12.2 Logarithmic Functions

12.3 Properties of Logarithms

12.4 Exponentials and Logarithmic Equations

12.5 Exponential Growth and Decay; Modeling Data

Chapter 13 April 03 - 17

Conic Sections and Systems of Nonlinear Equations

13.1 The Circle

13.2 The Ellipse

13.3 The Hyperbola

13.4 The Parabola; Identifying Conic Sections

13.5 Systems of Nonlinear Equations in Two Variables

Test # 3 Chapters 12 and 13 on April 29

Chapter 14 May 01 - 08

Sequences and Series

14.1 Sequences and Summation Notation

14.2 Arithmetic Sequences

14.3 Geometric Sequences and Series

Final Exam Chapters 8,9,10,11,12,13, and 14

May 13, 2014