

Math 091 Syllabus Spring 2013

Math 091 Intermediate Algebra Syllabus.

CRN: 20212 and 20225

Instructor: Oscar J. Hernandez

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Text-Book: Introductory and Intermediate Algebra for College Students.

4th Edition

Author: Robert Blitzer

Office Hours : MW 12:00-12:30 PM, TR 1:30-3:00PM

Class day and Time:

CRN: 20212 - MTWR 3:05-4:15 PM Room 2725

CRN: 20225 - MTWR 4:45-5:55 PM 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 of equations, 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 three by three linear systems by elimination or/and substitution. (ILO2)
- 5 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 an ability to solve systems of applications, including systems with three equations and three variables.
3. demonstrate and understanding of quadratic functions, including graphing and equations.
4. demonstrate and understanding of functions and relations, including one to one functions.
5. demonstrate and understanding of logarithmic and exponential functions and their graphs.
6. classify and graph ellipses, parabolas, and hyperbolas.
7. 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.

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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 13, 2013. After that date, I must give you a letter grade. It is your responsibility to drop, not mine.

Chapter 4 **January 14-24**

Systems of Linear Equations

- 4.1 Solving Systems of Linear Equations by Graphing.
- 4.2 Solving Systems of Linear Equations by Substitution
- 4.3 Solving Systems of Linear Equations by Addition
- 4.4 Problem Solving Using Systems of Equations
- 4.5 Systems of Linear Equations in Three Variables

Chapter 8

January 28-Feb. 6

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

Inequalities

- 9.1 Reviewing Linear Inequalities
- 9.2 Compound Inequalities
- 9.3 Equations and Inequalities involving Absolute Value

Test # 1 Chapters 4, 8, 9 Feb. 07

Chapter 10

Feb. 11-27

Radicals, Radical 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

Feb. 28-March 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

Test # 2 Chapters 10 and 11, March 14

Chapter 12

March 18-28

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 08-17

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 April 18

Chapter 14

April 22- May 02

Sequences and Series

- 14.1 Sequences and Summation Notation
- 14.2 Arithmetic Sequences
- 14.3 Geometric Sequences and Series

Final Exam Chapters 4,8,9,10,11,12,13, and 14
May 06, 2013