

Math 091 Syllabus Fall 2012

Math 091 Intermediate Algebra Syllabus. FALL 2012

CRN: 10422

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**Text-Book: Introductory and Intermediate Algebra for College Students.
4th Edition**

Author: Robert Blitzer

Office Hours : MW 9:30-10:00 AM and 12:50-1:20 PM, TR 4:20-5:20 PM

Class day and Time:

CRN: 10419 and CRN: 10420

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.

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 November 10, 2012. After that date, I must give you a letter grade. It is your responsibility to drop, not mine.

Chapter 4 **Systems of Linear Equations**

August 20-27

- 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 **Basics of Functions**

August 29-Sept. 10

- 8.1 Introduction to Functions
- 8.2 Graphs of Functions
- 8.3 The Algebra of Functions
- 8.4 Composite and Inverse Functions

Chapter 9

September 11-17

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

Test # 1 Chapters 4, 8 and 9 Sept-19

Chapter 10 **Sept. 24 - Oct. 03**

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 **Oct. 08-15**

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 October 17

Chapter 12

Oct. 22 - 29

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

Oct. 31-Nov. 07

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 Nov. 14

Chapter 14

Nov. 19-28

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

December 05, 2012