Math 115 Section 01, 02, 07
College Algebra
Fall '09

Course Description: 115 College Algebra / 3 units. Review of exponents, equations, and inequalities; function notation, composition, and inverses; linear, quadratic, polynomial, exponential, and logarithmic functions and their graphs. Prerequisite: MATH 090 at USD with a grade of C- or better, or pass Level 1 mathematics placement exam within the previous year. (every semester).

For information on the Math Placement Exam including scheduled exam times and specific rules regarding course eligibility, please go to the Math Placement web site http://mathplacement.sandiego.edu.

Text: College Algebra Essentials 3e, Third Edition; You must also have the MyMathLab Student Access Kit for CourseCompass which comes with the text if you buy it new from the USD bookstore. This is REQUIRED for the course. If you do not have an access code, you must purchase one.

Author: Robert Blitzer
Publisher: Pearson-Prentice Hall
Instructor: Dr. Jack W. Pope (pope@sandiego.edu)
Office: Serra 143
Class Time:
Section 01, 10:45AM - 12:05PM, Section 02, 02:30PM - 03:50PM, Section 07, 09:15AM - 10:35AM, all on Tuesday and Thursday

Office Hours: Tuesdays 01:15pm-02:15pm; Thursdays 01:15pm-02:15pm; Occasional changes on Tuesday and Thursdays when meetings occur.
Wednesdays 12:15pm - 3:00pm and by Appointment on Wednesdays or Thursdays

Classroom: Serra 209 -- rare visits to Serra or Maher Computer Labs

Math Resources: The Math Center (Serra 310) provides assistance with Mathematics studies. For times of operation, contact the Math office or see the Math Center Web Page

Course Content: Includes practice problems and practical applications

Chapter One: Equations and Inequalities
- Linear Equations, Rational Equations
- Quadratic Equations
- Other Types of Equations
- Linear Inequalities and Absolute Value

Chapter Two: Functions and Graphs
- Definitions: Functions and Relations
- Linear Functions; slope-intercept; point-slope equations; graphing
- Transformations; composite functions
- Inverse functions
- Distance and Midpoint Formulas; review circles
Chapter Three: More About Polynomials and a Bit about Rational Functions

- Quadratic functions; polynomial functions and their graphs
- Remainder and Factor Theorems
- Zeros (Roots) of Polynomials
- Rational Functions and rational inequalities

Chapter Four: Exponential and Logarithmic functions

- Exponential Functions; laws of exponents review
- Logarithmic Functions
- Properties of Logarithms
- Equations Involving Exponents and Logs
- Exponential Growth and Decay

Chapter Five: topics as time available

Grading:

<table>
<thead>
<tr>
<th>Three tests (at 100 points each)</th>
<th>300</th>
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<tbody>
<tr>
<td>Homeworks (normalized score)</td>
<td>80</td>
</tr>
<tr>
<td>Final Exam</td>
<td>120</td>
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<tr>
<td>Total Possible</td>
<td>500</td>
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Makeup tests scheduled at discretion of instructor and topics covered may include additional covered material. Late homeworks or other assignments will incur a substantial penalty. The final exam is cumulative and will be held at regularly scheduled exam time. Sec 01 11:00am-01:00pm Tuesday 12/22/09 (S209); Sec 02 11:00am-01:00pm Thursday 12/17/09 (S209); Sec 07 08:00am-10:00am Thursday 12/17/09 (S209).

Rev Date: Jul 29, 2009