COLLEGE ALGEBRA FOR PHYSICAL SCIENCES
21:640:109 (3 credits)

This course is for students who intend to major or minor in Business, Economics, Life Science, Physical Science, Computer Science, or Mathematics. For related questions, contact the College Algebra Coordinator at rpuhak@rutgers.edu.

Students who intend to major or minor in one of the Humanities, Social Sciences, Criminal Justice, Nursing, or Public Administration should take 21:640:107 (College Algebra for Humanities and Social Sciences.)

COURSE DESCRIPTION:
Functions and operations of functions, operations on polynomials, fractions, solution of linear and quadratic equations and inequalities, graphing of linear and quadratic functions, solution of word problems, functions, polynomial and rational functions, systems of equations, algebra of matrices.

PREREQUISITES:

IMPORTANT NOTES:

1. Successful completion of College Algebra for Physical Sciences with a grade of "C" or better fulfills the mathematics proficiency requirement.

2. For College Algebra, credits will be given for JUST ONE of the three College Algebra courses (107, 108, 109), e.g. a student cannot receive credits for BOTH Math 107 “College Algebra for Humanities” AND Math 109 “College Algebra for Physical Science”.

3. The final exam for this course is cumulative. Students must pass the final exam in order to pass the course.

4. FREE TUTORING is available in the Rutgers Learning Center, Room 140 Bradley Hall. For more information, call 973.353.5608 or see related website at http://lc.newark.rutgers.edu/tutoring.html
TEXTBOOK: THREE OPTIONS ARE AVAILABLE


   Students must be sure their copy comes with a code/license (or obtain one) for access to the computer-based homework system Enhanced WebAssign. That license also provides access to the electronic College Algebra book.


   This special discounted package of text is available ONLY at
   i) Barnes & Noble Bookstore - on campus on the ground floor in Bradley Hall
   and
   ii) NJ Books - just off campus at corner of Bleecker St. and University Avenue

   It comes with a code/license for access to the computer-based homework system Enhanced WebAssign and the electronic College Algebra book. Purchasing this package results in considerable savings, relative to purchasing the bound copy of the text.


   Students must be sure their copy comes with a code/license (or obtain one) for access to the computer-based homework system Enhanced WebAssign.

**THIS COURSE COVERS THE FOLLOWING CHAPTERS AND SECTIONS:**

- Chapter 1: Basic Concepts and Properties
- Chapter 2: Equations, Inequalities and Problem Solving (except Sections 2.6 and 2.7)
- Chapter 3: Polynomials
- Chapter 4: Rational Expressions
- Chapter 5: Exponents and radicals (except Sections 5.5 and 5.7)
- Chapter 6: Quadratic equations and inequalities (except Section 6.6)
- Chapter 7: Equations and inequalities in two variables (except Section 7.5)
- Chapter 8: Functions (except Sections 8.2, 8.5, and 8.7)
- Chapter 9: Polynomial and Rational Functions (Sections 9.4 and 9.5 ONLY)
- Chapter 11: Systems of equations (except Section 11.6)
- Chapter 12: Algebra of matrices (except Section 12.4)

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[http://www.ncas.rutgers.edu/math](http://www.ncas.rutgers.edu/math)