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U.S.I.C.A.Course Outline/Syllabus		
Grade/Course: ALGEBRA I 1200310 **Grade Level:** 9th High School		
A)TEXT BOOK: Algebra Concepts and Applications by Jerry Cummins, Carol Mallory, Kay Mcclain, Yvonne Mojica, Jack Price, Glencoe Mcgraw-Hill. Hardcover, Published by Glencoe/Mcgraw-Hill Edition **ISBN: 0078681707 – ISBN 13: 9780078681707** **ISBN-10: 0078607752 | ISBN-13: 978-0078607752**		
Order No.: 1	**Code:**ALG1000	**Class Type:**Online
Resources: Text book Teacher works CD Teacher interactive online Links Sky Conference Zoom, Skype, Social Media	**Length:**1 year	**Instructional Supports:** Textbook, Magazines, Journals, Websites Links, ,Video Conference, Videos, Comprehensive Reading Plan, Zoom, Skype, Social Media
Area: Mathematics	**Credits:** 1	**Total Numbers of class hours**:300 hrs
Type: Mandatory	**Standards:** Florida Standard www2.dadeschools.net	**Prerequisite:** Students must have successfully passed a pre-algebra or a general math class in middle/high school.

B) Description:

This course is a full year, high school credit course that is intended for the student who has successfully mastered the core algebraic concepts covered in the prerequisite course, Pre-Algebra. The course introduces variables and expressions, equations, inequalities, functions, graphing, polynomials, factoring, quadratic equations, statistics and probability.

C) Objectives:

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

1. Solve single variable, absolute value, and linear systems of equations.
2. Solve and graph single variable, absolute value, and linear inequalities.
3. Evaluate, solve, and graph linear and quadratic functions as well as conceptualize the relationship between the independent and dependent variable of a function.
4. Understand and know how to apply the distance, midpoint, and slope formulas as well as the Pythagorean theorem.
5. Form an equation of a line using the slope-intercept, point-slope and standard forms of a line.
6. Organize data in the form of a table or matrix; perform complex matrix operations such as multiplication, evaluating the determinant, and solving a system of linear equations using Cramer's Rule.
7. Apply basic fundamental rules of exponents.
8. Be able to construct a formula or equation necessary to solve algebraic word problems involving area, perimeter, and linear systems of equations, basic probability and statistical reasoning, distance, and compounding interest.
9. Identify patterns and make predictions from an orderly display of data using concepts of Probability and Statistics

D) Contents

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E. Methodology

E)Academic Methodology:	
Tests	30%
Assignments	50%
Final Exam	20%

F) Book Reference:

1.McDougalLittell Algebra 1: Applications, Equations, & Graphs [Hardcover] (Author)
2. Algebra Survival Guide Workbook: Thousands of Problems To Sharpen Skills and Enhance Understanding [Paperback] by Josh Rappaport(Author)
3 High School Algebra Tutor (High School Tutors Study Guides) [Paperback]
The Editors of REA (Author), Algebra Study Guides (Author), Staff of Research & Education Association (Author)

H) Web Reference:

http://www.calculatorsoup.com/
www.mathlinks.us
www.coolmath.com
www.mathpower.com/linkstu.htm
www.algebra.com
www.math.com

www.purplemath.com/modules/index.htm
www.softmath.com/links-to-algebra.html
www.emtech.net/math2.htm
www.homeschoolmath.net/online/algebra.php
www.webmath.com
http://www.homeworksimplified.com
www.homeschoolmath.net
http://school.discoveryeducation.com/homeworkhelp/webmath/
http://www.cut-the-knot.org/content.shtml
http://tutorial.math.lamar.edu/Extras/AlgebraTrigReview/AlgebraTrigIntro.aspx
http://www.sosmath.com/
http://www.ams.org/mathscinet/
http://www.aaamath.com/
http://www.algebrahelp.com

I. Journals:

Advances in Applied Mathematics
Advances in Difference Equations
Advances in Differential Equations
Advances in Geometry
Advances in Mathematics
Advances in Theoretical and Mathematical Physics
Algebra & Number Theory
Algebra Colloquium
Algebra Universalis
Algebraic & Geometric Topology
American Journal of Mathematics
American Mathematical Monthly
Analysis and Applications
The Analyst

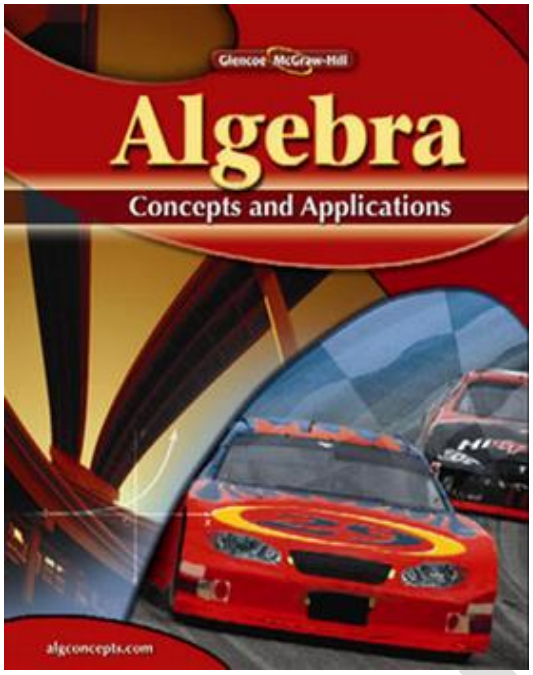
J.Magazines:

Math Horizons
Millennium Mathematics

K. Organizations:

National Council of Teachers of Mathematics (N.C.T.M.)

BOOK:



Text Book: ALGEBRA I
Course: No. 1200310
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ACADEMIC MISCONDUCT:

Academic misconduct includes cheating (using unauthorized materials, information, or study aids in any academic exercise), plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and any and all other actions that may improperly affect the evaluation of a student's academic performance or achievement, or assisting others in any such act or attempts to engage in such acts. Academic misconduct in any form is inimical to the purposes and functions of the school and therefore is unacceptable and prohibited. Any faculty member, administrator or staff member may identify an act of academic misconduct and should report that act to the department head or administrative supervisor.

Students violating the standards of academic honesty are subject to disciplinary action including reduction of a grade(s) in a specific course, assignment, paper, or project; a formal or informal reprimand at the professorial, dean, or academic vice president level; expulsion from the class in which the violation occurred; expulsion from a program; or expulsion from the school.