DRD 382 Course Outline as of Fall 2014

CATALOG INFORMATION

Dept and Nbr: DRD 382 Title: PRE-ALGEBRA
Full Title: Pre-algebra
Last Reviewed: 10/18/2010

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Non-Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	LMATH 381

Catalog Description:
This course is designed for students with disabilities to prepare for beginning algebra. Skills taught include operations with signed numbers; calculating perimeter, area and volume of geometric shapes; simplifying algebraic expressions; solving linear equations and pre-algebra word problems. Emphasis is placed on critical thinking and use of study strategies specific to students with disabilities.

Prerequisites/Corequisites:

Recommended Preparation:
Course Completion of DRD 380 (or LMATH 380)

Limits on Enrollment:

Schedule of Classes Information:
Description: This course is designed for students with disabilities to prepare for beginning algebra. Skills taught include operations with signed numbers; calculating perimeter, area and volume of geometric shapes; simplifying algebraic expressions; solving linear equations and pre-algebra word problems. Emphasis is placed on critical thinking and use of study strategies

specific to students with disabilities. (Grade or P/NP)
Prerequisites/Corequisites:
Recommended: Course Completion of DRD 380 (or LMATH 380)
Limits on Enrollment:
Transfer Credit:
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Effective:	Inactive:
UC Transfer:	Effective:	Inactive:

CID:

Certificate/Major Applicable:
Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon successful completion of the course, students will:

1. Apply disability-based strategies to mathematics.
2. Develop and apply strategies to solve word problems.
3. Demonstrate familiarity with assistive technology related to mathematics.
4. Add, subtract, multiply and divide signed numbers.
5. Calculate perimeter, area and volume of basic geometric shapes.
6. Identify and use real number concepts including: rational, irrational and natural numbers, absolute value and additive inverse.
7. Use vocabulary associated with geometry and algebraic expressions.
8. Simplify algebraic expressions using combining, multiplication and division.
9. Solve basic algebraic equations.
10. Operate a scientific calculator in multiple operations.

Topics and Scope:

Topics include, but are not limited to:

I. Multi-sensory strategies to address specific mathematical disabilities
 A. collaborative and group learning strategies
 B. individualized disability-based strategies
 C. general study skill and test taking strategies
II. Anxiety Management Strategies and Techniques
III. Basic mathematical, computational and word problems using addition, subtraction, multiplication and division of whole numbers, decimals and percents

IV. Multi-step operations with whole numbers, fractions, decimals, percents, equations, signed numbers and geometry
V. Algebraic terminology including terms, variables, degrees and monomials, binomials and polynomials
VI. Real number concepts including rational, irrational and natural numbers, absolute value and additive inverse
VII. Geometry terminology and concepts with solutions of diagrams and word problems
VIII. Simplifying algebraic expression including order of operations
IX. Solving linear equations
X. Introduction and development of scientific calculator skills

Assignment:

1. Approximately 25 homework assignments including worksheets and notebooks
2. In-class problem solving assignments including use of a scientific calculator
3. Approximately 25 quizzes
4. Two unit tests
5. Midterm
6. Comprehensive final exam

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems and in-class assignments	Problem solving 30 - 50%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

use of scientific calculator	Skill Demonstrations 5 - 10%

Exams: All forms of formal testing, other than skill performance exams.

lab quizzes, unit tests, midterm, final exam	Exams 40 - 60%

Other: Includes any assessment tools that do not logically fit into the above categories.

attendance and participation	Other Category 5 - 10%

Representative Textbooks and Materials:

Prealgebra (6th). Martin-Gay, K. Elayn. Pearson: 2010
Prealgebra for College Students (2nd). Greaney, Matthew. Thomson Publishing: 2006