

CATALOG INFORMATION

Dept and Nbr: MATH 150B Title: ELEM ALGEBRA 2
Full Title: Second Half of Elementary Algebra
Last Reviewed: 4/8/2013

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 Applicable
Grading: Grade Only
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly:

Catalog Description:
This course is the second half of a standard beginning algebra course, including rational expressions, radicals and rational exponents, quadratic equations, and the graphs of parabolas. The sequence MATH 150A/MATH 150B constitutes a complete course in beginning algebra equivalent to a standard first year high school algebra course. Not open to those who have taken MATH 151 within the past 3 years with a grade of "C" or better.

Prerequisites/Corequisites:
Math 150A.

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Second half of a standard beginning algebra course. The sequence MATH 150A/150B constitutes a complete course in the beginning algebra equivalent to a standard first year high school algebra course. Not open to students who have taken MATH 151 within the past 3 years with a "C" or better. (Grade Only)

Prerequisites/Corequisites: Math 150A.

Recommended:

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:

To be successful, students should be able to:

1. Solve systems of equations and inequalities in two variables and their applications.
2. Perform operations of addition, subtraction, multiplication, and division on rational expressions, and simplify.
3. Evaluate rational exponents.
4. Solve radical equations and their applications.
5. Simplify and perform operations with rational expressions and complex fractions.
6. Solve rational equations with applications.
7. Solve quadratic equations by completing the square and quadratic formula.

Topics and Scope:

RATIONAL EXPRESSIONS

Simplification and operations, Complex fractions, Rational equations, Applications

SYSTEMS OF EQUATIONS

Solving systems of equations in two variables by graphing, elimination, and substitution, Applications.

RADICALS

Square roots, Simplification, sums and products, rationalizing denominators of square roots. Higher-indexed radicals, Rational exponents, Pythagorean Theorem, Radical equations, Applications.

QUADRATIC EQUATIONS

Completing the square, Quadratic formula, Applications.
QUADRATIC EQUATIONS IN TWO VARIABLES
Graphing $y = ax^2 + bx + c$, Intercepts, Vertex

Assignment:

1. The student will have daily outside reading, problem set assignments from required text(s), or instructor chosen supplementary materials.
2. Instructional methodology may include, but not limited to: lecture, demonstrations, oral recitation, discussion, supervised practice, independent study, outside project or other assignments.

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, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing
0 - 0%

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

Homework problems, Exams

Problem solving
15 - 40%

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

Performance exams

Skill Demonstrations
50 - 75%

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

Multiple choice

Exams
5 - 25%

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

WRITING ASSIGNMENTS

Other Category
0 - 10%

Representative Textbooks and Materials:

Text(s) required of each student will be selected by the department, a committee of the department, or the responsible instructor from the books currently available. Choices in the past have included:

BEGINNING ALGEBRA, (8TH) by Lial/Miller/Hornsby, Harper Collins, 1998
ELEMENTARY ALGEBRA (6th), McKeague, Saunders, 1998

