

#13

LC 090
Introduction to College Math I
(3c-01-3sh)

DESCRIPTION

Notes: 1. A student may not register for this course after successfully completing any course offered by the Mathematics Department with the following course numbers:

2. This course carries institutional, non-graduating credit.

Reviews basic computational skills and their applications. Includes operations with whole numbers, decimals and fractions; the concepts of ratios, proportions and percents; basic geometric principles; and an introduction to algebra.

TEXT

5. Simplify fractions.

6. Find the LCM and GCr.

7. Compare fractions and mixed numbers

10. Rename decimals as fractions.

11. Rename numbers as percents.

12. Rename percents as numbers.

13. Understand and apply the concept of percent.

14. Understand and apply the concept of proportion.

COURSE OUTLINE

Whole Numbers and Decimals

- Week 1 Addition and Subtraction
- Week 2 Multiplication
- Week 3 Division
- Week 4 Order, Exponents, and Order of Operations Agreement

Fractions and Mixed Numbers

- Week 5 Least Common Multiple and Greatest Common Factor
- Week 6 Addition and Subtraction
- Week 7 Multiplication and Division

Percents and Proportion

- Week 8 Ratios and Proportions

- Week 9 Proportion
- Week 10 Percents and Interest

Measurement and Geometry

- Week 11 Statistics and Graph Reading
- Week 12 Measurement
Angles, Lines, and Geometric Figures

Introduction to Algebra

- Week 13 Introduction to Signed Numbers
- Week 14 Operations with Signed Numbers

Variable Expressions

REFERENCES

Aufmann, Richard N., and Barker, Vernon C. Basic College Mathematics: An Applied Approach. Boston, MA: Houghton Mifflin Company, 1987.

Aufmann, Richard N., and Barker, Vernon C. Essential Mathematics with Applications. Boston, MA: Houghton Mifflin Company, 1987.

Barker, Jack, Rogers, James, and Van Dyke, James. Arithmetic. Philadelphia, PA: Saunders College Publishing, 1987.

~~Bell, Frank D. Mathematics. Boston, MA: Houghton Mifflin Company, 1987.~~

Skills for Arithmetic. New York: McGraw-Hill, Inc., 1980.

Goozner, Calman. Computational Skills for College Students. New York: Amsco College Publications, 1976.

Gossage, Loyce C. Mathematics Skill Builder. Cincinnati, OH: South-Western Publishing Company, 1977.

Hackworth, Robert D., and Howland, Joseph W. Programmed Arithmetic. Clearwater, Fla: H and H Publishing Company, Inc., 1983.

Johnston, C.L., Willis, A.T., and Hughes, G.M. Essential Arithmetic. Belmont, CA: Wadsworth Publishing Company, 1984.

Mandery, Matthew, and Schneider, Marvin. Achieving Competence in Mathematics. New York: Amsco School Publications, Inc., 1987.

~~McKeown, Charles B. Basic Mathematics. Belmont, CA: Wadsworth Publishing Company, 1984.~~

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LC 095
Introduction to College Math II
(3c-01-3sh)

DESCRIPTION

- Notes:
1. A student may not register for this course after successfully completing any course offered by the Mathematics Department, without the written approval of the Learning Center Director;
 2. This course carries institutional, non-graduating credit.

Introduces beginning algebraic concepts, with emphasis on signed numbers, rules and properties of equations; exponents; polynomials; factoring; and rational expressions.

TEXT

Introductory Algebra, Aufmann/Barker; Beginning Algebra and Problem Solving, Wise; or a comparable workbook text.

PURPOSE OF COURSE

The purpose of this course is to prepare the student for entry into college level math.

COURSE OBJECTIVES

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

1. Add, subtract, multiply, and divide positive and negative numbers

properties

3. Understand and recognize the use of the addition and multiplication property of

equality

4. Know the major classifications of numbers
5. Solve linear equations in one variable
Solve linear inequalities in one variable
6. Solve linear equations in two variables

Solve linear inequalities in two variables

7. Solve systems of linear equations (optional)

COURSE OUTLINE

- Week 1 Real Numbers
- Week 2 Variable Expressions
- Week 3 & 4 Solving Equations
- Week 5 Exponents

Week 9 Algebraic Fractions

~~Week 10 & 11 Graphs and Linear Functions~~

- Week 12 Systems of Linear Equations (optional)
- Week 13 Inequalities
- Week 14 Radical Expressions

REFERENCES

Aufmann, Richard N., and Barker, Vernon C. Beginning Algebra with Applications. Boston, MA: Houghton Mifflin Company, 1986.

Aufmann, Richard N., and Barker, Vernon C. Introductory Algebra: An Applied Approach. Boston, MA: Houghton Mifflin Company, 1986.

Barker, Jack, Rogers, James, and Van Dyke, James. Basic Algebra. Philadelphia, PA: Saunders College Publishing, 1987.

Bramson, Morris. Algebra: An Introductory Course. New York: Amsco School Publishing, Inc., 1987.

Dressler, Robert E., and Dressler, Isidore. Introductory Algebra for College Students. New York: Amsco School Publications, 1976.