



COURSE OUTLINE OF RECORD

Number: MATH A090

TITLE: Support for Liberal Arts Mathematics

ORIGINATOR: Naoko Maekawa

EFF TERM: Fall 2019

FORMERLY KNOWN AS:

DATE OF

OUTLINE/REVIEW: 11-28-2018

CROSS LISTED COURSE:

TOP NO: 1702.00

CID:

SEMESTER UNITS: 2.0

HRS LEC: 36.0

HRS LAB: 0.0

HRS OTHER: 0.0

CONTACT HRS TOTAL: 36.0

STUDY/NON-CONTACT HRS RECOMMENDED: 72.0

CATALOG DESCRIPTION:

A concurrent support course for Math A100, Liberal Arts Mathematics, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; conversion between decimals, percents and fractions; selected algebraic topics essential to Liberal Arts Mathematics; the graph of a line; and problem-solving strategies.

JUSTIFICATION FOR COURSE:

AB 705, the guidelines from the Chancellor's Office, and the Academic Senate strongly recommend the creation of a concurrent support course for students enrolling into transfer level mathematics who are identified as underprepared and in need of support. This course is designed to provide underprepared students with concurrent support while they are enrolled in Math A100.

PREREQUISITES:

COREQUISITES:

- MATH A100: Liberal Arts Mathematics

ADVISORIES:

ASSIGNED DISCIPLINES:

Mathematics

MATERIAL FEE: Yes [] No [X] Amount: \$0.00

CREDIT STATUS: Noncredit [] Credit - Degree Applicable [] Credit - Not Degree Applicable [X]

GRADING POLICY: Pass/No Pass [X] Standard Letter [] Not Graded [] Satisfactory Progress []

OPEN ENTRY/OPEN EXIT: Yes [X] No []

TRANSFER STATUS: CSU Transferable[] UC/CSU Transferable[] Not Transferable[X]

BASIC SKILLS STATUS: Yes [X] No []

LEVELS BELOW TRANSFER: 1 level below transfer level

CALIFORNIA CLASSIFICATION CODES: Y - Not Applicable

NON CREDIT COURSE CATEGORY: Y - Not applicable, Credit Course

OCCUPATIONAL (SAM) CODE: E

REPEATABLE ACCORDING TO STATE GUIDELINES: No [X] Yes [] **NUMBER REPEATS:**

REQUIRED FOR DEGREE OR CERTIFICATE: No [X] Yes []

GE AND TRANSFER REQUIREMENTS MET:

COURSE LEVEL STUDENT LEARNING OUTCOME(S) Supported by this course:

1. Solve word problems
2. Graph Linear Equations

COURSE OBJECTIVES:

1. Address the affective side of learning in order to provide students with the skills necessary to be successful in a transfer level math course.
2. Perform operations with real numbers.
3. Covert between decimal, percent and fraction.
4. Evaluate Algebraic Expression
5. Solve linear equations and systems of equations.
6. Graph linear equations and inequalities.
7. Solve word problems related to statistics.

COURSE CONTENT:

LECTURE CONTENT:

- A. Learning skills
 1. Study skills
 2. Time management
 3. Math anxiety
 4. Test taking skills
- B. Operations with real numbers
 1. Rounding
 2. Addition, subtraction, multiplication, and division of real numbers
 3. Order of operations
 4. Computations with a calculator
- C. Percents
 1. Percents as decimals and fractions
- D. Selected algebraic topics
 1. Evaluating algebraic expressions
 2. Solving linear equations
 3. Solving systems of two linear equations in two variables
- E. Introduction to graphing lines
 1. The Cartesian coordinate system
 2. Finding intercepts and slopes of lines
 3. Graphing linear equations
 4. Interpreting the graph of a linear equation
 5. Graphing linear inequalities in two variables
- F. Skills for solving word problems in statistics
 1. Identify the question to be answered
 2. Setting up appropriate notation
 3. Setting up an appropriate equation/inequality
 4. Clearly communicating the correct answer

LABORATORY CONTENT:

METHODS OF INSTRUCTION:

- A. Lecture:
- B. Independent Study:

INSTRUCTIONAL TECHNIQUES:

Lecture, discussion, collaborative learning

COURSE ASSIGNMENTS:

Reading Assignments

Textbook chapters and supplements. 1 hour/week

Out-of-class Assignments

- A. Practice problem sets requiring application of course material
- B. Preparation assignments that require students to answer specific questions that will be discussed in an upcoming class meeting.

2 hours/week

Writing Assignments

- A. Short-answer questions.
- B. Essay questions.
- C. Group and/or individual projects.-

1 hour/week

METHODS OF STUDENT EVALUATION:

Short Quizzes

Written Assignments

Problem Solving Exercises

Demonstration of Critical Thinking:

Group work, quizzes or written tests, and application of skills in support of Liberal Arts Mathematics.

Required Writing, Problem Solving, Skills Demonstration:

Group work, quizzes or written tests

TEXTS, READINGS, AND RESOURCES:

TextBooks:

- 1. Angel, Alan. *Survey of Mathematics*, 10th ed. ed. Pearson, 2016

Software:

- 1. MML. Pearson, 10th ed. ed.

Other:

- 1. Other appropriate textbook as chosen by fulltime faculty

LIBRARY:

Adequate library resources include: Print Materials

Non-Print Materials

Online Materials

Comments:

Attachments:

[Attached Files](#)