

NCBS 403A: BRIDGE TO COLLEGE LEVEL MATHEMATICS I

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2024
Units:	0
Hours:	25 lecture per quarter (25 total per quarter)
Degree & Credit Status:	Non-Degree-Applicable Non-Credit Course Basic Skills, 3 Levels Below Transfer
Foothill GE:	Non-GE
Transferable:	None
Grade Type:	Non-Credit Course (Receives no Grade)
Repeatability:	Unlimited Repeatability

Student Learning Outcomes

- Students demonstrate mastery in an increased number of mathematical topics as described in the course objectives
- Students gain more math skills as described in the course objectives to increase score on placement exam.
- Students can identify one test-taking strategy to increase success on the placement exam.

Description

Part one of a bridge to college level mathematics program for students who seek to refresh mathematical reasoning, computational skills, and test-taking strategies. Topics include mathematical skills from arithmetic and pre-algebra.

Course Objectives

The student will be able to:

1. Apply arithmetic operations on whole numbers, fractions, percents, decimals, and signed numbers
2. Apply order of operations with real numbers
3. Solve problems involving proportional reasoning

Course Content

1. Apply arithmetic operations on whole numbers, fractions, decimals, percents, and signed numbers
 - a. Add whole numbers, fractions, decimals, percents, and signed numbers
 - b. Subtract whole numbers, fractions, decimals, percents, and signed numbers
 - c. Multiply whole numbers, fractions, decimals, percents, and signed numbers
 - d. Divide whole numbers, fractions, decimals, percents, and signed numbers

- e. Solve application problems that utilize arithmetic operations on whole numbers, fractions, decimals, percents, and signed numbers
2. Apply order of operations with real numbers
 - a. Simplify mathematical expressions, including the use of order of operations
 3. Solve problems involving proportional reasoning
 - a. Write and solve proportions
 - b. Unit conversion
 - c. Solve application problems involving ratios and proportions

Lab Content

Not applicable.

Special Facilities and/or Equipment

Access to computers with internet capabilities.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Homework
Quizzes
Class participation

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

After an initial assessment, students will work online using software such as ALEKS to improve their understanding in identified areas of need. The instructor will offer whole-class mini-lectures on test-taking skills and selected math topics. The instructor will provide one-on-one in-class targeted support for individual needs around test-taking and specific math topics.

Representative Text(s) and Other Materials

No text required.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

Not applicable.

Discipline(s)

Mathematics-Basic Skills: Noncredit