

NCBS 403A: BRIDGE TO COLLEGE LEVEL MATHEMATICS I

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Winter 2022
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:

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

Course Content

- Apply arithmetic operations on whole numbers, fractions, decimals, percents, and signed numbers.
 - Add whole numbers, fractions, decimals, percents, and signed numbers.
 - Subtract whole numbers, fractions, decimals, percents, and signed numbers.
 - Multiply whole numbers, fractions, decimals, percents, and signed numbers.
 - Divide whole numbers, fractions, decimals, percents, and signed numbers.
 - Solve application problems that utilize arithmetic operations on whole numbers, fractions, decimals, percents, and signed numbers.
- Apply order of operations with real numbers.

- Simplify mathematical expressions including the use of order of operations.
- Solve problems involving proportional reasoning.
 - Write and solve proportions.
 - Unit conversion.
 - 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

- Homework
- Quizzes
- Class participation

Method(s) of Instruction

After an initial assessment, students will work online in a self-paced environment 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