



South Central College

## MATH 0097 Quantitative Reasoning Corequisite

### Common Course Outline

#### Course Information

<b>Description</b>	This course provides support for students taking MATH 110 and must be taken simultaneously with MATH 110 to further develop skills needed for successful completion of the college-level course. MATH 0097 consists of topics including real numbers, variable expressions, linear equations, graphing, analyzing data, problem solving, and study skills. Corequisite: MATH 110 (Pre-requisite: Classic Accuplacer score 30+ in Arithmetic OR Next Gen Accuplacer score 220+ Arithmetic OR ACT score 18 or below OR MCA score 750+).
--------------------	---

<b>Total Credits</b>	2
<b>Total Hours</b>	32

#### Types of Instruction

Instruction Type	Credits/Hours
Lecture	2/32

#### Pre/Corequisites

Prerequisite	Classic Accuplacer score 30+ in Arithmetic
Prerequisite	OR
Prerequisite	Next Gen Accuplacer score 220+ Arithmetic
Prerequisite	OR
Prerequisite	ACT score 18 or below
Prerequisite	OR
Prerequisite	MCA score 750+

#### Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

#### Course Outcomes

**1. Perform arithmetic on real numbers.**

**Learning Objectives**

Perform arithmetic on integers, fractions, and decimals.  
Apply the order of operations.  
Convert between fractions, decimals, and percentages.  
Compute the absolute value of a number.  
Round numbers containing decimals.  
Perform calculations using scientific notation.

**2. Manipulate variable expressions.**

**Learning Objectives**

Combine like terms.  
Evaluate variable expressions.  
Apply the rules of exponents.  
Perform operations on variable expressions.

**3. Demonstrate an understanding of linear equations.**

**Learning Objectives**

Solve linear equations and inequalities.  
Graph linear equations.

Interpret slope and intercepts from a linear model.

**4. Graph in a two dimensional coordinate system.**

**Learning Objectives**

Plot ordered pairs in the Cartesian coordinate system.  
Create graphs.  
Interpret graphs.

**5. Analyze data.**

**Learning Objectives**

Represent data in forms such as bar graphs, scatter plots, and circle graphs.  
Interpret charts and graphs.

Apply appropriate labels to data.  
Calculate mean and median.

**6. Solve applied problems.**

**Learning Objectives**

Apply formulas to solve applied problems.

Construct equations to solve applied problems.  
Interpret data to solve applied problems.  
Determine whether a solution is reasonable.

**7. Develop study skills and habits for successful independent learning in college mathematics classes.**

**Learning Objectives**

Implement a study schedule.  
Demonstrate note-taking strategies.  
Practice reading mathematics textbooks and documents.  
Utilize resources to support learning, such as study groups, the instructor, or tutoring.

**SCC Accessibility Statement**

Disability Services provides accommodations and other supports to students with permanent and temporary disabilities that affect their SCC experience. Disabilities may include mental health (anxiety, depression, PTSD), ADHD, learning disabilities, chronic health conditions (migraine, fibromyalgia), sensory disabilities, and temporary disabilities (broken arm,

surgery). Common accommodations are extended test time, private room for testing, audiobooks, and sign language interpreter.

Contact us: Faribault A116 (507) 332-5847. North Mankato E112 (507) 389-7222. [ds@southcentral.edu](mailto:ds@southcentral.edu)  
[www.southcentral.edu/disability](http://www.southcentral.edu/disability)