

# **South Central College**

# MATH 120 College Algebra

## **Common Course Outline**

#### **Course Information**

**Description** 

College algebra studies functions and their applications. This course focuses on linear functions, quadratic functions, polynomial and rational functions, exponential and logarithmic functions, and related equations, inequalities, and graphs. Additional topics include inverse functions, systems of equations and inequalities, matrices, sequences and series, and the Binomial Theorem. Math 120 satisfies the MNTC Category 4 Mathematical/Logical Reasoning requirement.

Total Credits 4

**Total Hours** 64

## **Types of Instruction**

Instruction Type Credits/Hours

Lecture 4/64

#### **Pre/Corequisites**

At least one of the following conditions must be met for enrollment in Math 120:

Corequisite enrollment in Math 0098

Completion of Math 0085 with a grade of C or higher

Completion of Math 0095 with a grade of C or higher

Accuplacer score 56+ Arithmetic AND 76+ in Elementary Algebra AND 50+ in College Math

Next Gen Accuplacer score 250-300 AAF

ACT Math score 22-36

MCA score 1158-1164

#### **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.

Distinguish between an arithmetic sequence and a geometric sequence Compute the sum of an arithmetic series Compute the sum of a geometric series Utilize sigma notation to work with series Solve application problems involving sequences and series

## 16. Apply the Binomial Theorem

Learning Objectives

Apply the Multiplication Principle for counting
Apply permutations to counting arguments
Apply combinations to counting arguments
Compute Binomial Coefficients
Expand a binomial to the nth power

## **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/www.southcentral.edu/disability