

Scottsdale Community College (SCC) credits the diverse Indigenous people still connected to the land on which we gather. Our college resides on the ancient lands of the Huhugam, ancestors to the O'odham and tribal territory of the Salt River Pima-Maricopa Indian Community (SRP-MIC). SRP-MIC is a federally recognized tribe - one of 22 Arizona Indigenous tribes and one of 574 across the United States. Attached to this physical space is a painful history of forced removal and the resulting intentional genocide of its Indigenous people. We remain appreciative of our ability to teach, learn and serve in a space of such importance and reverence.

SCC acknowledges the land on which we are situated today as the traditional land and home of two distinct tribal nations: the Onk Akimel O'odham (Pima) and the Xalychidom Piipaash (Maricopa). We take this opportunity to thank the original caretakers of this land, the Huhugam. We offer our respect to all O'odham and Piipaash of the past, present and future.

# **Course Information**

Semester & Year: Spring 2025

Course Title: College Mathematics

Course Prefix & Number: MAT 141

Section Number: 29582

Credit Hours: 4

Start Date: January 14<sup>th</sup>, 2025

End Date: May 9<sup>th</sup>, 2025

Class Meeting Location: CM 465

Meeting Days: Tuesday and Thursday

Meeting Times: 12:30 PM – 2:10 PM

#### **Course Format**

This course is in-person. The start date for the course is January 14<sup>th</sup>, 2025. The end date for the course is May 9<sup>th</sup>, 2025. The class is scheduled to meet from 12:30 PM to 2:10 PM.

### **Instructor Information**

Instructor: Gabriel Tarr

Email: gabriel.tarr@scottsdalecc.edu

Phone: 480-425-6746

Office Location: CM 419

Office Hours: Monday and Wednesday 11:30 PM – 12:30 PM

Tuesday and Thursday 2:30 PM - 4:00 PM

# **Course Description**

Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include proportional reasoning, modeling, finance, probability, and statistics.

# **Prerequisites**

An appropriate District placement, or a grade of C or better in (MAT052, MAT053, and MAT055), or (MAT055, MAT056, and MAT057), or MAT085, or MAT09+, or MAT103, or MAT114, or MAT115, or MAT12+.

## **Course Competencies**

- 1. Solve contextual problems using proportional reasoning and dimensional analysis. (I)
- 2. Demonstrate evidence-based decision making. (I-V)
- 3. Evaluate the reasonableness of an answer in the context of the problem. (I-V)
- Demonstrate fluency with formulas, including evaluating and isolating variables.
  (II-V)

- 5. Model data using linear and exponential (and optionally other) equations. (II)
- 6. Compute and interpret empirical and theoretical probabilities and expected value of events. (III)
- Calculate, display and interpret measures of central tendency, variability and position. (IV)
- 8. Use the Standard Normal Distribution to solve problems concerning normally distributed data. (IV)
- 9. Solve finance problems including loans, amortizations, investments. (V)

#### **Texts and Course Materials**

**Required Texts**: College Mathematics, Scottsdale Community College, 4th edition OER, ISBN: 979-8-88672-003-7. You can find a PDF of the book in MOER. There is no requirement to purchase a physical copy of the book, but you may find it to be beneficial.

Online Course Management System: This course uses MOER, an Online Course Management System developed by David Lippman and the State of Washington. All of the Online Homework will be accessed through this system. Grades will also be posted through this system. The software is free to use and can be accessed here at <a href="moer.maricopa.edu">moer.maricopa.edu</a>. Failure to enroll in MOER and complete the required syllabus quiz by the due date will result in being withdrawn from the course.

Course ID: 20375 Enrollment Key: 29582

**Calculator Requirement**: A graphing calculator or graphing calculator app is required for this course. The instructor strongly recommends a TI-83/84. Calculators with QERTY keyboards or those that perform symbolic algebra (such as the TI-92/TI89) are not allowed. You are expected to bring your calculator to each class session. Your cell phone may NOT be used as a calculator on your exams. The SCC Media Center will rent calculators this semester on a first-come basis. Go to the Media Center located in the Information Technology (IT) Building to rent a graphing calculator. Rentals are first-come, first-served and there are limited quantities.

Computer Access, Webcam, Microphone, and Email: You will need regular access to a computer with online capabilities in order to complete online assignments.

## **Course Technologies**

View the <u>Accessibility Statements & Privacy Policies</u> of technologies used in this course.

#### **Maricopa Systems**

This course uses key Maricopa systems for course management and communication.

- Canvas Learning Management System
- Student Maricopa Gmail Account
- Maricopa Open Educational Resource Learning System (MOER)

### **Streaming Media/Audio/Video Tools**

This course uses webcasting, lecture capture systems, YouTube, and/or other streaming media services.

YouTube

### **Student Assignment Tools**

This course requires students to participate in or submit assignments using desktop or cloud-based applications.

- Google Products
- Microsoft Office 365
- Screencast-O-Matic
- Adobe Creative Cloud

#### **Course Policies**

The following are policies specific to this course. Students are also responsible for the college policies included on the <u>Student Regulations</u> page of the Maricopa Community College District website.

**Withdrawing from the Course**: If it becomes necessary to withdraw from the course, you should speak with admissions office and fill out the proper forms there. There is a last day to withdraw without an instructor's signature. It is not guaranteed that you will be able to withdraw from the course after this date.

**Math/Science Tutor Center**: Free tutoring is available at the tutoring center. Details can be found at http://www.scottsdalecc.edu/students/tutoring/math.

**Email and Contacting the Instructor**: It is HIGHLY inappropriate for your family members, guardians, private tutors, former teachers, or any other third-party actors to contact your instructor to discuss anything related to your academic standing in this class. The instructor is more than happy to discuss your academic standing with YOU (the student), but emails, messages, and phone calls from third-party actors on your

behalf will not receive a response (except in extreme circumstances as determined by the instructor). In certain cases, these third-party actors may be blocked from contacting the instructor.

Be respectful of your classmates and the instructor. Don't be a jerk!

## **Grading Standards & Practices**

#### **Grade Scale**

Letter Grade	Percent Interval
Α	90 – 100%
В	80 - 89.9999%
С	70 – 79.9999%
D	50 - 69.9999%
F	Below 50 %

#### **Grade Distribution**

**Exams (60% of the course):** Your exams are meant to test your PERSONAL mathematical aptitude of topics covered prior to each exam in this class, but occasionally you will be required to draw from your PERSONAL aptitude in topics covered in pre-requisite courses, your real-life experiences, and common sense. There will be two exams in this course (each worth 30% of the course grade). The dates can be found at the end of this syllabus.

Make up exams will only be granted under extreme circumstances. You should meet with your instructor AT LEAST TWO WEEKS BEFORE THE SCHEDULED EXAM to discuss arrangements. This discussion must take place BEFORE the scheduled date of the exam. Failure to adhere to this policy may result in a 0 for the exam and withdrawal from the course.

Homework (25% of course grade): You will be expected to complete regular homework assignments using MOER. Assignments and due dates will be posted in MOER. It is to your benefit to keep up, however, if you miss a due date, you have 255 late passes that you are able to use with no penalty to your homework grade. Each late pass only extends the due date for 24 hours, so that 255 goes quickly if you fall too far behind.

**Homework Quizzes (15% of course grade):** Regular homework quizzes will be due a few days after the corresponding homework. Please note that you will only have two attempts per each question with the second attempt being worth a maximum of 70%.

## **Response Time**

Students can expect a response time of up to 24 hours (though likely sooner) for the instructor to respond to messages sent via MOER or email. This 24-hour window does not include weekends, holidays, or official district breaks. Students can expect assignments to be graded within 3 class meetings of the assignment's due date.

# **Attendance Policy**

Any student who misses more than three (3) classes may be withdrawn from the course. Any student who misses an exam may be withdrawn from the course. You are responsible for learning any material covered during an absence or tardiness.

# **Instructional Contact Hours (Seat Time)**

This is a four (4) credit-hour course taught in 14 weeks. The typical student should plan to spend at least 14 hours per week on in-class direct instruction and out-of-class coursework (homework, studying, etc.). **Some students may require more or less time per week depending on ability, aptitude, and content**.

# **Learning Tools and Your Privacy and Security**

SCC utilizes a variety of software applications and web-based tools operated by third party vendors to support student learning. To allow student access to the application, site or tool, certain identifiable information may be required to establish a user name or password, and submit work and/or download information from these tools. Inherent with all internet-based tools, there is a risk that individuals assume when electing to use these tools, as they may place information at risk of disclosure.

To use learning tools responsibly, please observe all laws and the Maricopa Community College District Student Conduct Code, such as copyright infringement, plagiarism, harassment or interference with the underlying technical code of the software. As a student using a learning tool, you have certain rights. Any original work that you produce belongs to you as a matter of copyright law. You also have a right to the privacy of your educational records. Your contributions to learning tools constitute an educational record. By using the tool, and not taking other options available to you in

this course equivalent to this assignment that would not be posted publicly on the internet, you consent to the collaborative use of this material as well as to the disclosure of it in this course and potentially for the use of future courses.

# **Tentative Course Schedule**

Date	Topic or Section
Tuesday, January 14, 2025	Chapter 1 - Measurement and Dimensional Analysis
Thursday, January 16, 2025	Chapter 1 - Measurement and Dimensional Analysis
Tuesday, January 21, 2025	Chapter 2 - Equations and Linear Behavior
Thursday, January 23, 2025	Chapter 2 - Equations and Linear Behavior
Tuesday, January 28, 2025	Chapter 3 - Percentages
Thursday, January 30, 2025	Chapter 3 - Percentages
Tuesday, February 4, 2025	Chapter 4 - Modelling
Thursday, February 6, 2025	Chapter 4 - Modelling
Tuesday, February 11, 2025	Chapter 5 - Compound Interest
Thursday, February 13, 2025	Chapter 5 - Compound Interest
Tuesday, February 18, 2025	Chapter 6 - Annuities and Loans
Thursday, February 20, 2025	Chapter 6 - Annuities and Loans
Tuesday, February 25, 2025	Chapter 6 - Annuities and Loans
Thursday, February 27, 2025	Chapter 6 - Annuities and Loans
Tuesday, March 4, 2025	Question Session for Midterm
Thursday, March 6, 2025	Midterm Exam - Chapters 1 through 6
Tuesday, March 11, 2025	Spring Break - No Class
Thursday, March 13, 2025	Spring Break - No Class
Tuesday, March 18, 2025	Chapter 7 - Venn Diagrams
Thursday, March 20, 2025	Chapter 7 - Venn Diagrams
Tuesday, March 25, 2025	Chapter 8 - Intro to Probability
Thursday, March 27, 2025	Chapter 8 - Intro to Probability
Tuesday, April 1, 2025	Chapter 9 - Probability

Date	Topic or Section
Thursday, April 3, 2025	Chapter 9 - Probability
Tuesday, April 8, 2025	Chapter 10 - Counting
Thursday, April 10, 2025	Chapter 10 - Counting
Tuesday, April 15, 2025	Chapter 11 - Describing Data
Thursday, April 17, 2025	Chapter 11 - Describing Data
Tuesday, April 22, 2025	Chapter 11 - Describing Data
Thursday, April 24, 2025	Chapter 12 - The Normal Distribution
Tuesday, April 29, 2025	Chapter 12 - The Normal Distribution
Thursday, May 1, 2025	Question Session for Final
Tuesday, May 6, 2025	Final Exam - Chapters 7 through 12
Thursday, May 8, 2025	No Class Meeting

Students are responsible for the information contained in this syllabus, the Syllabus page in your Canvas course and the **College Policies & Student Services** page found in the First Steps module of your Canvas course. Students will be notified by the instructor of any changes in course requirements or policies.