



Fall 2024

Course Information

Course Title:	College Mathematics
Course Prefix & Number:	MAT 140
Section Number:	12676
Credit Hours:	5

Course Format

The course format for this course is Online, 08/19/2024 – 12/13/2024

Instructor Information

Instructor:	Amy Volpe
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Course Description

Description: Working knowledge of college-level mathematics and its applications to real-life problems. Emphasis on understanding mathematical concepts and their applications. Topics include set theory, probability, statistics, finance, and geometry.

Prerequisites

An appropriate mathematics placement score, OR a grade of "C" or better for MAT090, or MAT091, or MAT092, OR (an appropriate diagnostic score, or a grade of "C" or better in each of the following courses: MAT055, MAT056, and MAT057), or a grade of "C" or better in MAT120, or MAT121, or MAT122

Course Objectives

1. Distinguish between a subset and a proper subset. (I)
2. Use Venn diagrams to solve applied problems involving the union, intersection, and complement of sets. (I)
3. Distinguish between experimental and theoretical probability, and use each to solve applied problems. (II)
4. Use conditional probability to solve applied problems involving dependent events. (II)
5. Use probabilities to calculate odds, either in favor of or against a particular event, and vice versa. (II)
6. Solve probability problems involving combinations and permutations. (II)
7. Organize, analyze, and display data using multiple representations. (III)
8. Calculate and interpret measures of central tendency and dispersion. (III)
9. Calculate and interpret measures of location (percentiles and quartiles). (III)
10. Solve applications using the normal distribution. (III)
11. Solve applications involving loans and amortizations. (IV)
12. Solve applications involving annuities. (IV)
13. Calculate the annual interest rate given the annual yield and vice versa. (IV)
14. Solve real-life problems using exponential growth. (IV)
15. Use appropriate formulas and units of measure for composite geometric shapes and figures from real life problems. (V)
16. Apply unit analysis skills to solve applied problems. (V)
17. Use dimensional analysis to convert units of measurement between different systems. (V)
18. Use written and verbal communication to describe process and results. (I-VI)
19. Model and solve real-world problems. (I-VI)

Texts, Course Materials and Technologies

There is a course textbook and a course workbook. They are both available as pdfs for free and do not need to be purchased.

The textbook is more of a reference book. The lessons and videos correspond to the workbook. If you want to write in the workbook as you watch the lessons instead of on other blank paper, I recommend buying the workbook to do this. Whatever works best for you and your learning.

There are links to the lulu site to purchase the books in the MOER course Textbook folder.

Technology:

1. MOER Account (FREE)

This course uses MOER, an Online Course Management System developed by David Lippman and the State of Washington. All of the Online Homework and Quizzes will be accessed through this system. Grades will also be posted through this system. The software is free to use and can be accessed at <https://MOER.maricopa.edu/>. Once you have an account, you can enroll in the course using the information below.

Course ID: 19470

Enrollment Key:1234

2. Respondus Lock Down Browser + WebCam Software (FREE)

There will be two proctored exams in this course. If you choose to take the exam online, you will need to download the free Respondus Lock Down Browser + WebCam Software onto the computer in which you are taking the exam (links below). You may take these exams in any quiet location with an internet connection on a computer with the Respondus Lock Down Browser + WebCam Software. This software will restrict your access to any other items on your computer while you are testing. You will need a web camera for the software to record your session. Most computers come with these pre-installed. You will take a Practice Exam at the beginning of the course to ensure you have everything you need and to familiarize yourself with the software.

[Download Lockdown Browser](#)

[Here is a short video about the Respondus LockDown Browser Software.](#)

3. **Calculator:** Calculators are required for this class. If you have a **TI-83/84 graphing calculator**, you are all set. If you do not, and do not want to spend over \$100 on a calculator, I most highly recommend the **TI-30XS Multiview Scientific Calculator**. Make sure to get this exact type of calculator. There are many similar calculators that are not as good. There are videos and examples that will show you how to use this particular calculator. You may use the calculators above on all exams. I will provide online calculators on exams for special functions not available on the TI-30XS

4. **Computer:** You will need regular access to a computer (with Internet access) in order to complete the online assignments that are part of this course. Your computer will need a web-cam for the proctored online testing. The labs and computer locations on campus may be used to access your online work (IT-100 computer lab, library, LC 371 Writing Center lab, Math Tutoring Center). You will need to have an SCC Network Login account to access the computers on campus.

5. **Email:** Your Maricopa Email address is part of your account automatically as an SCC student. I will primarily contact you via email and MOER. You can forward your Maricopa Gmail to another account, as you prefer.

Course Policies

The following are policies specific to this course. Students are also responsible for the college policies included on the [Student Regulations](#) page of the Maricopa Community College District website.

Late Passes

- Students are given 15 late passes at the beginning of the course.
- Each late pass extends a **single** interactive lesson, homework or quiz assignment (not all) by 48 hours from the due date (so Tuesday at 11:59 pm instead of Sunday at 11:59 pm).
- You may only use **one late pass per assignment**. No assignments may be completed for credit more than 2 days after the due date.
- Once you are out of late passes, you may not complete any assignments late for credit. You may still review the homework in the “Extra Homework” Folder in MOER, but you will not receive credit.
- Late passes cannot be used on the Orientation Assignment, Practice Exam, Midterm Review, Midterm Exam, Final Review or Final Exam.
- Late exams may be approved by the instructor and will receive a 15% penalty per day late. Email or message your instructor if you would like to request a late exam with a penalty.

Grading Standards & Practices

The information below explains the structure of the course, requirements, and grading procedure.

- 1) There are 13 Chapters and review sections in this course.
- 2) For each Chapter, you must complete five assignments: Interactive Review Lesson, Review Homework, Interactive Lesson, Homework, and Quiz.
- 3) There are 2 proctored exams for this course. They must be taken by the dates indicated in the course calendar in MOER. You must use the Respondus Lock Down Browser and WebCam to proctor the exam which will connect you to your Canvas account
- 4) Students who do not complete both Exams will earn a grade of W.

Required Assignments	Number of Assignments	Percent of Total Grade
1. Interactive Lessons	13	10%
2. Online Homework	13	15%
3. Online Quizzes	13	25%
4. Midterm Exam	1	25%
5. Final Exam	1	25%

Grades are updated continually and visible in the MOER Gradebook section. Check there often to see your overall percent in the course. Final letter grades are assigned as indicated below.

Course Grade: A	90% – 100%
Course Grade: B	80% – 89.9%
Course Grade: C	70% – 79.9%
Course Grade: D	60% – 69.9%
Course Grade: F	Less than 60%
Course Grade: W	See Withdrawal section of Syllabus

Response Time

Students can expect a response time of 24 hours for the instructor to respond to messages sent via MOER, Canvas Learning Management System, or email. Students can expect assignments to be graded within 48 hours of the assignment's due date.

Attendance Policy

Attendance in an online classroom involves consistent and regular progress on the course assignments. Failure to complete at least one unit each week may result in being withdrawn from the course.

Instructional Contact Hours (Seat Time)

This is a five (5) credit-hour course. Plan to spend at least five hours on course content or seat time (direct instruction) and twelve hours on homework weekly. Accelerated courses will require additional time per week.

Withdrawal Policy

Class Policies

- 1) Failure to complete your Orientation Exercise assignment and Testing Options assignment with 100% in MOER by Friday, 08/23/24, will result in being dropped from the course.
- 2) Students who do not complete the 2 proctored exams will be withdrawn.
- 3) Students who fall behind schedule by more than one Chapter may be withdrawn.
- 4) Students who do not complete any work in MOER for 10 consecutive days (and are behind schedule) may be withdrawn.

If you find that you need to withdraw from the course, please speak to me first. I may be able to recommend other options or discuss alternative courses of action concerning future classes.

College Policies

- 1) Student may initiate an official withdrawal from any course by submitting a withdrawal form with required signatures to the A&R office within published deadlines.
- 2) Failure to attend any classes is not a guarantee for a refund or an excuse of debt incurred through registration. See Refund Policy in the [2019-2020 College Catalog](#), page 241.
- 3) Official date of withdrawal is last date of attendance as determined by student's withdrawal or as reported by the instructor.
- 4) The official date of withdrawal will determine degree of refund, if any.
- 5) Failure to file an official withdrawal form within published deadlines can result in a failing grade and may affect refund of course tuition and fees.

Technology Statement(s)

Third-Party Learning Tools

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, submit work and/or download information from these tools. Inherent with all internet-based tools, there is risk that individuals

assume when electing to use the products and services made available by these tools, as they may place information at risk of disclosure.

In this course, we will use MOER and Respondus Lockdown Browser + WebCam to complete or participate in assignments, activities and/or access course materials. [Accessibility Statements and Privacy Policies](#) for all tools used at SCC are available.

To use the third-party tools responsibly, please observe all laws and the Maricopa Community College District [Student Conduct Code](#). Some specific aspects of law and conduct code to remember are prohibitions against copyright infringement, plagiarism, harassment or interferences with the underlying technical code of the software. As a student using a third-party 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 the third-party learning tool constitute an educational record. By using the third-party 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.

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.