



PHOENIX COLLEGE

A MARICOPA COMMUNITY COLLEGE

1202 West Thomas Road Phoenix, AZ 85013 • 602-285-7800

MAT142 & SECTION [REQUIRED]

College Mathematics - Semester and Year - 3.0 - PreRequisite: [70 or Above EdReady](#) or 2.6 or Above 2-year high school GPA or [MCCCD District Placement](#) - Format

INSTRUCTOR CONTACT [REQUIRED]

Instructor:

Email:

Office

Phone: [Your Phone Number]

Hours:

[Your

[Your

[Your

Office

Name]

Email]

Hours]

COURSE DETAILS [REQUIRED]

Location:

Dates: [Start and End Dates]

Days:

Time: [Meeting Time]

[Classroom

[Meeting

Location]

Days]

Instructional Contact Hours and Minimum Expectations for the number of hours spent out-of-class to complete coursework: For every hour you spend in class, you should spend at least two (2) hours outside of class studying the material and completing your assignments. For example, if you take a class one (1) hour a day, three days a week, you should devote at least **6 hours** a week outside of class.

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.

MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT OFFICIAL 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)
4. 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)
7. 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)

Phoenix Union Discrete Mathematics Course Alignment

Discrete Mathematics is the mathematics of decision making and optimization for finite settings.

Unit	Concepts	MCCCD Competency Alignment
Statistics	Data Representation and Analysis Modeling with Linear and Exponential Functions for Best Fit Measures of Central Tendency Measures of Variation Percentiles and Quartiles Normal Distributions Applications	1, 2, 3, 4, 5, 7, 8
Finance	Interest Rates and Yields (Percents and Percent Change) Simple and Compound Interest (Modeling with Linear and Exponential Functions) Loans and Amortization Annuities Financial Planning Effective Rates Applications	1, 2, 3, 4, 5, 9
Probability	Probability of Events Conditional Probability Binomial Probability Odds Counting techniques (Combinatorics) Experimental vs. theoretical Expected value Applications	2, 3, 4, 6

Geometry	Unit Conversions Volume Surface Area	1, 2, 3, 4
Graph Theory	Euler Hamilton Adjacency Matrices	2, 3
Spanning Trees	Minimum Spanning Trees Vertex Coloring and Conflict Resolution	2, 3

REQUIRED COURSE MATERIALS

- Enter information about textbooks, materials and technologies.
- Writing instruments
- Composition notebook
- Expo markers
- Graphing calculator (Desmos or TI-Nspire)
- Laptop - Students will utilize Microsoft TEAMS as our primary form of learning- including classroom meetings, classroom assignments, and classroom resources.

**If students are experiencing technical difficulties with their PC to contact helpdesk@phoenixunion.org. We will provide tech support remotely when possible and in-person by appointment when needed.

GRADING

Progress reports will be submitted every three weeks. Both students and parents/guardians may view current grades through Student and ParentVUE. This online program can be accessed through the district website www.pxu.org. Contact the school registration office for the username and password required to gain access to the program. The point scale used in our grade book is as follows:

Proficiency Level	Letter Grade	Points
Systemic Proficiency	A	100-90
Reliable Proficiency	B	80-89
Proficient	C	70-79
Limited Proficiency	D	60-69
Inadequate Proficiency	F	50-59

High School Transcript Grade

Every student will receive a final letter grade at the end of the 18-week semester that is an A, B, C, D, F, or INC (Incomplete). The final grade is calculated using the following weights: Coursework 90% · Final Exam 10%

Coursework is calculated based on the following weights: Standards Based Assessments 70% · Standards Based Activities 30%

College Transcript Grade

Every student will receive a final letter grade at the end of the course that is an A, B, C, D, F, I (Incomplete), W (Withdraw), or Y (Withdraw Failing). The final grade is calculated based on student proficiency level of the college course competencies.

College Attendance Withdrawal Policy

If you stop attending this class after the 45th day of the semester, your instructor may award a grade of W, Y, or F depending on your status in the class up until the day you stopped attending. Please discuss any desires to withdraw from the class with your instructor so together you can decide on the best course of action. **Please follow your department's policy regarding withdrawals.**

TUITION CHARGES AND REFUNDS

Students who officially withdraw from credit classes (in fall, spring, or summer) within the withdrawal deadlines listed below will receive a 100% refund for tuition, class and registration processing fees. Deadlines that fall on a weekend or a college holiday will advance to the next college workday except for classes fewer than 10 calendar days in length or as specified by the college. Calendar days include weekdays and weekends. Refer to individual colleges for withdrawal and refund processes. Never attending is not an allowable refund exemption or an excuse of the debt incurred through registration.

Length of Class	Official Withdrawal Deadlines for 100% Refund
1-9 calendar days	Prior to the class start date
10-19 calendar days	1 calendar day including the class start date
20-29 calendar days	2 calendar days including the class start date
30-39 calendar days	3 calendar days including the class start date
40-49 calendar days	4 calendar days including the class start date
50-59 calendar days	5 calendar days including the class start date

60-69 calendar days	6 calendar days including the class start date
70+ calendar days	7 calendar days including the class start date

**Course fees and registration processing fees will be refunded only if the student qualifies for a 100% refund. Debts owed to any MCCCCD college must be satisfied before any refunds are paid to the student. Refunds for students receiving federal financial assistance are subject to federal guidelines. Requests for exceptions to the refund policy must be filed within one year from the semester in which the course was taken.*

ATTENDANCE POLICY

Attendance and punctuality are a very important part of this course. Group work and discussions cannot be reproduced for absent or tardy students. If a student wishes to be successful in this course, he or she MUST attend class. The district attendance policy (state below) will be followed.

“Absent” is defined as nonattendance in an assigned class or activity for more than one-half of the period. (PUHSD Governing Board Policy J-1561 JHR).

“Tardy” is defined as not being in the assigned class or activity when the tardy bell has finished ringing. (PUHSD Governing Board Policy J-1561 JHR).

Students may fail the class for the semester in any course, when reaching a total of 12 excused/unexcused absences and after school-documented interventions have been exhausted. (Student Procedures Handbook)

Attendance will be taken based on students logging in on TEAMS using the timeframes in the bell schedule presented below. Please login to TEAMS at the designated times so that we can move through our learning together.

Minutes	Start Time	End Time	Period
90 min.	7:23AM	8:50AM	Period 0
90 min.	9:00AM	10:27AM	Period 1
90 min.	10:37AM	12:04PM	Period 2
50 min.	12:04PM	12:54PM	Lunch/Period 3
90 min.	12:54PM	2:21PM	Period 4
9 min.	2:21PM	2:30PM	Check & Connect
30 Min.	2:30PM	3:00PM	Clubs/Tutoring

Independent Work

Independent work will be assigned in every unit to allow students to explore and practice what they are learning. Independent work includes, but is not limited to, classwork, homework, quizzes, activities, and online practice. Independent work is critical for students to complete because it is designed to clear up

misconceptions, apply learning, and identify areas to be reviewed by the student and teacher so that every student has the opportunity to get the help they need. All independent work is due the day PRIOR to the unit test. Partial credit will be awarded for completed work turned in after the due date but before the test retake deadline.

There will be no extra credit.

Make-up Policy

When a student is absent it is his or her responsibility to find out what was missed and get the work completed as soon as possible. Online, there will be an ongoing list in TEAMS with necessary links for all the lessons assigned. In class, there will be an assignment calendar and folder posted in the classroom for students to reference. Students are given one extra day to turn in work for each day they were absent. If a student feels that additional help is needed to complete the assignment(s), he/she may contact the teacher.

Assessments

Each unit will have multiple assessments that measure the standards in the unit. Through independent work and unit review materials, students will have ample opportunity to prepare for the standards on the unit assessment. Students that are not proficient on any of the standards on a unit test may recover those concepts to improve their grade.

Assessment Retakes

If a student is unhappy with their performance on a standard, they will have the opportunity to take a recovery quiz once to improve the grade. Students will have two weeks from the day they get their test results to recover, however, extenuating circumstances will always be considered on an individual basis. Students will need to complete all review materials for the standard to take the recovery quiz.

ACADEMIC INTEGRITY

Academic misconduct and dishonesty includes, but is not limited to, cheating, plagiarism, excessive absences, use of abusive or profane language, and disruptive and/or threatening behavior. All instances of academic dishonesty will be reported to the Chair of the [Your department name] Department and other appropriate authorities. Students displaying acts of academic dishonesty are subject to grade adjustment, course failure, probation, suspension, or expulsion. See the [student handbook](#) for more information regarding cases of academic misconduct.

Cheating is not permitted. The highest standard of academic integrity is expected of all students. Since exams, quizzes, projects, and other coursework are measures of student performance, honesty is required to ensure accurate measurement of your learning. Anyone caught cheating will receive a zero on the assignment/exam and face disciplinary actions.

We have all been students in a traditional classroom. We know what behaviors and attitudes are appropriate in person, but it is easy to forget about reality in an online setting. It is important that we maintain etiquette in

our online classrooms and that we continue to respect one another as human beings. Here are some things to keep in mind when it comes to netiquette in our classroom:

In-Person	Online
Attend class and be on time.	Attend synchronous classes and be on time. Be an active participant for the entire class period. Attendance will not always be taken at the same time.
Be considerate of other students, the teacher, and the classroom environment.	If you disagree with what someone has said, practice all your communication skills as you express that disagreement. Remember, there are no "take-backs."
Dress appropriately for school and wear your ID.	Automatically turn off your camera upon entering virtual class but dress appropriately because there will be times when you will have to turn your camera on and be live.
Come to class ready to work and learn.	Be prepared to respond, share, and meet with others throughout the virtual learning sessions.
Leave all electronic devices off and out of sight while in the classroom.	Avoid distractions during online lessons. Turn off the TV, do not play games, and put away your cell phone.
Follow the teacher's instructions and procedures upon entering the classroom.	Follow teacher's instructions and procedures in the virtual classroom environment.
Take responsibility for your actions and use your classroom time wisely.	If you run into any difficulties, don't wait! Send a message immediately to your instructor so that you do not fall behind.
Be an active learner and participate/contribute in class.	Participate regularly and be an active member of the learning community.
Ask for help and attend tutoring if needed.	There are no dumb questions, feel free to post your questions on the message board as many may benefit from the answer.
Do your best! Success is a choice.	Do your best! Success is a choice in the virtual classroom too.

BEHAVING RESPONSIBLY AND COOPERATIVELY IN A MATH CLASS

Part of becoming a better Mathematics student is learning to appreciate the ideas and critiques of others. Part of our purpose in this class is to come together as a community of learners in which ideas are shared and we learn by doing and explaining, not just by watching. Often, you will find that your classmates have different

perspectives than you and can offer tips or techniques that can enhance your learning and understanding. You have a lot to learn from the instructor, but you also have a lot to learn from each other. Students are expected to come to class prepared to participate. Remember, none of us is as smart as all of us! Everyone has something to offer. You will be asked to work cooperatively with others and you are expected to be a contributing member to your group.

RESOURCES

Academic Support [UPDATE RESOURCES PER COLLEGE]

Learning Enhancement Center:

Many students find that college coursework provides new academic challenges. Students who wish to deepen their understanding of course concepts, extend their skills, and improve their performance in their course(s) are encouraged to use the free tutoring and other support services in the Learning Enhancement Center. Tutoring is available at ...

Writing Center:

The Writing Center provides one-on-one appointments to help students during any phase of the writing process: brainstorming, prewriting, researching, drafting, and revising. The Writing Center is located at...

Classroom Accommodations for Students with Disabilities

In accordance with the Americans with Disabilities Act, the Maricopa County Community College District (MCCCD) and its associated colleges are committed to providing equitable access to learning opportunities to students with documented disabilities (e.g. mental health, attentional, learning, chronic health, sensory, or physical). Each class/term/semester that a student is in need of academic adjustments/accommodations, the qualified student is required to work with the Disability Resources & Services Office (DRS) at their individual college(s). Contact with the DRS should be made as soon as possible to ensure academic needs are met in a reasonable time. New and returning students must request accommodations each semester through DRS Connect online services. To learn more about this easy process, please contact your local DRS office.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations, you are welcome to contact DRS by using the information listed on the following webpage: <https://district.maricopa.edu/consumer-information/disability-resources/contacts>. The DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions qualifying for accommodations/academic adjustments. Reasonable accommodations are established through an interactive process between you, your faculty, and DRS; and only those academic adjustments/reasonable accommodations granted by the DRS are recognized by the college and District. It is the policy and practice of the MCCCD to create inclusive and accessible learning environments consistent with federal and state law.

Please request your accommodations through the Disabilities Resources and Services Office.

Addressing Incidents of Sexual Harassment/Assault, Dating/Domestic Violence, and Stalking

In accordance with Title IX of the Education Amendments of 1972, MCCCDC prohibits unlawful sex discrimination against any participant in its education programs or activities. The District also prohibits sexual harassment—including sexual violence—committed by or against students, District employees, and visitors to campus. As outlined in District policy, sexual harassment, dating violence, domestic violence, sexual assault, and stalking are considered forms of "Sexual Misconduct" prohibited by District policy.

District policy requires all college and District employees in a teaching, managerial, or supervisory role to report all incidents of Sexual Misconduct that come to their attention in any way, including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Incidents of Sexual Misconduct should be reported to the college Title IX Coordinator. MCCCDC will provide on its [Title IX Coordinators web page](#), a link to all the [Title IX Coordinators](#) in the district. Reports may also be reported at: <https://district.maricopa.edu/consumer-information/reporting>.

CANVAS: LEARNING MANAGEMENT SYSTEM

MCC and other Maricopa Colleges use Canvas, an online learning management system. Whether your class is face-to-face, hybrid, or entirely online, course materials should be accessed by students in Canvas.

[How to Access Canvas](#)

<https://learn.maricopa.edu/>

STUDENT EMAIL

You will need a student email account so that your instructor can communicate with you regarding course work and performance in this class. This is available to all MCC students at no charge. Contact your instructor through your Maricopa email or through Canvas. Emails from accounts other than Maricopa (Yahoo, msn, Hotmail) will go into spam and will delete immediately.

[Setting Up Your Maricopa Email](#)

OFFICE OF CIVIL RIGHTS

Pregnant Student? Student of Faith? Please discuss possible accommodations with your instructor in advance of those needs. MCC strives to foster an environment where students will be welcomed and supported.

Learn and Earn: Do you have a 3.25 GPA? Read on!

Learn and Earn! Do you have a 3.25 GPA? Read on! The Honors Achievement Award is open to students who have completed 12 college-level credits within the Maricopa Colleges and have a minimum cumulative GPA of 3.25. If this is you, apply to the Honors Program, enroll in at least 6-graded credits, including one 3-credit honors course for the semester. To be awarded funds, you must complete the honors course with at least a "C" grade and participate in one co-curricular activity during the semester. Any students who qualify for this award should contact the Honors Office.

Counseling Services

The Counseling Department provides a variety of counseling services to assist students in addressing their personal, academic, career development, prevention, and intervention challenges. Confidential services are offered free of charge to students. Counseling faculty support and empower students in the process of setting and attaining their academic, career, and personal goals.

STATEMENT OF STUDENT RESPONSIBILITIES **[REQUIRED]**

It is your responsibility to understand the policies listed in this syllabus as these are the guidelines that your instructor will follow for grading, attendance, etc. It is also your responsibility to read and understand the college policies included in the student handbook as they may apply to you in the case of an incomplete grade, withdraw for failure to attend, etc.