



# MAT 142: College Mathematics

## Overview

The purpose of this course is to relate college-level mathematics to real-life problems. We will emphasize problem-solving techniques, specifically by means of discussing concepts including sets, probability, statistics, finance, and geometry. Students will apply basic college-level mathematics to real-life problems. Appropriate for students whose major does not require MAT 117 or 170.

## What You'll Learn

- Apply knowledge about set theory (sets, set notation, and set operations) to solve problems
- Apply basic counting techniques and probability theory to solve probability-based problems
- Apply a variety of statistical measures to solve problems
- Solve a variety of financial-based problems including problems involving simple and compound interest, annuities, and amortized loans
- Apply geometric concepts (dimensional analysis, perimeter, area, surface area, volume, similarity, proportions, and trigonometric function) to solve geometry-based problems

## How to Succeed

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the [technical requirements](#).

**This course contains five proctored exams.**

## Earn College Credit

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student.

This course satisfies 3 credit hours toward the Mathematics (MA) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied.

In order to receive academic credit for this course, you must earn a grade of "C" or better. You have one year to add the course to your transcript.

## Exams and Grading

**30%**

**Homework Assignments**

**20%**

**Written Problems Assignments**

**50%**

**Exams**

# MAT 142: Continued

## Materials

This course makes use of open educational resources (OERs) provided within the course, **no purchase necessary**.

**Calculator:** A hand-held scientific calculator is required for this course. Recommended models include the TI-30XS Multiview or TI-34 Multiview. A graphing calculator, like the TI-83 or the TI-84 is not required but may be used. You are expected to use your calculator for all assignments and exams. Cellular phone calculators and calculators online or on a computer are NOT permitted during an exam. You are permitted to use the ALEKS calculator.

## Graded Assignments

Graded assignments are required and count towards your final grade. Students must submit all assignments via the course site unless otherwise instructed.

### Homework Assignments (30%):

- **Learning Assignments:** Each lesson contains a required learning assignment. You are expected to read the textbook and watch the lecture video for each lesson before starting on that learning assignment.
- **Practice Assignments:** The practice assignments are titled with the unit name and assignment number.

**Written Problems Assignments (20%):** You will draft the solution for each problem set and hand write the solution (showing both the work and the answer) and the explanation of your reasoning. You then take a picture of each of your solutions and submit that as your draft. You will then review the drafts of other members of your class. Finally, you will turn in a final solution for the problem set.

**Exams (50%):** There are five exams, each worth 10% of your final grade. Exams are **proctored** remotely using Honorlock, which records you and your environment during the exam.

## Course Communication

All communication will take place via the discussion forums and course announcement page. There will be a discussion forum where you can post general questions, comments, and direct inquiries for the instructor and course team. Please use these forums to ensure a timely response. Your instructor will not be able to respond to email.

## Additional Information

If you have questions about Universal Learner Courses and how they work, please visit [ea.asu.edu](http://ea.asu.edu) or contact our support team at [ulcourses@asu.edu](mailto:ulcourses@asu.edu).

## Instructor led Version

### Time Commitment

This is an asynchronous, online course. This means, while you will have deadlines, you do not need to be at your computer at specific times or participate in live activities.

To be successful in this class, you must view all course pages and complete all graded work by the deadlines indicated. Also, keep in mind that "attendance" in an online course means logging into the platform on a regular basis, checking for course announcements, and visiting and participating in the discussion forums.

# MAT 142: Continued

## Instructor led Cont.

### 8 week Version

This 3 credit, 8 week course requires about 135 hours of work. Therefore, expect to spend approximately 15-20 hours per week preparing for and engaging in this course.

### 12 week Version

This 3 credit, 12 week course requires about 135 hours of work. Therefore, expect to spend approximately 12-15 hours per week preparing for and engaging in this course.

### 16 week Version

This 3 credit, 16 week course requires about 135 hours of work. Therefore, expect to spend approximately 8-10 hours per week preparing for and engaging in this course.

## Assignment Deadlines

Your instructional team will provide all content and learning activities on or through your course site. It is your responsibility to review all content, fulfill all assignments on time, and ask any questions you have in the designated discussion area. It is also your responsibility to determine the due dates and times for all course assignments according to your time zone. Due to the large-scale format of Universal Learner Courses, late assignments will not be accepted at any point during the course, and we cannot make exceptions.

## Self paced Version

### Time Commitment

The work in this course is equivalent to an eight or 16 week course but you have one year to complete it. Please plan your goals accordingly. During this year, you are encouraged to work through the course at a pace that suits your needs.

You have one year from the date you enrolled to complete the course, and you have one year from the date you complete the course to purchase your academic credit.

### Course Resets

Self paced courses cannot be reset. If you are not happy with your grade and want to take the course again, you have two options: you may take the course the next time it is offered in an instructor led format or wait until a new version of the self paced course opens at the beginning of every academic year on the first day of class in August.

### Transcript

You will be able to add the course to your transcript **six weeks after enrolling**. Although the course is self paced, course attendance dates will be listed on your transcript. After purchasing the credits, the course will appear on your transcript in the session you **completed** the course. If you are on the cusp of two sessions and need to confirm the date of completion or beginning/end of a session, please contact our support team at [ulcourses@asu.edu](mailto:ulcourses@asu.edu).