



MAT 119: Finite Mathematics
Fall 2021
Course Syllabus
MW 1:30pm – 2:45pm, Section 71034

Instructor: Toan Vo
Email: tvo02@asu.edu
Class Hours: Monday and Wednesday, 1:30pm – 2:45pm
Location: West CLCC 216

Office Hours:

Day	Time	Location
Tuesday and Thursday	8:00am – 9:00am	Zoom (link will be in Canvas)
Other times	Schedule for an appointment	Zoom (link will be in Canvas)

Required Textbook: NONE

Optional Textbook: Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th Edition, by Barnett, Ziegler, and Byleen, published by Pearson

eBook: You gain access to the online textbook when you get the required Pearson access through Canvas. Pearson My Lab and Mastering access is available in Canvas on the menu on the left side.

Calculator REQUIRED: As an application based course, each student is required to know how to apply technology to solve problems. The Texas Instrument TI-83 or TI-84 graphing calculator is required. **All exams are online and timed assuming each student has a TI-83/84 calculator and knows how to use it.** Calculators with QWERTY keyboard or those that do symbolic algebra, such as TI-89, or TI-92 are not permitted.

Course Description: Finite Mathematics (3 credit hours) is an introduction to the mathematics required for the study of social and behavioral sciences and includes topics from finance, set theory, counting, probability, and statistics.

Requirement Designation: At present, MAT 119 fulfills the General Studies MA requirement.

Course Goal: The goal of the study of mathematics is to help students improve their critical reasoning skills by applying mathematical concepts and techniques to analyses, problem solving, and exposition.

The instructor reserves the right to make changes to this syllabus as needed.

Course Objective: The objective of this course is to enable each of you to apply the mathematical concepts and the demonstrated technologies to solve word problems in finance, sets, counting, probability and probability distribution.

More specifically, students should be able to:

1. Solve financial problems using mathematical formulas and/or technology
2. Identify future value, sinking funds, and amortization problems
3. Solve applications involving sets
4. Distinguish applications involving permutations and combinations
5. Calculate conditional probability and use Bayes' Formula
6. Calculate expected value in decision-making
7. Create data description and probability distributions representation given data
8. Calculate central tendency and measure of dispersion
9. Solve applications involving Bernoulli trials and binomial distributions
10. Approximate the binomial distribution with normal distribution

Prerequisites: A students entering MAT119 is expected to have completed College Algebra (MAT117) or its equivalent with a grade of A, B, or C.

Note: Meeting the prerequisites does **not** guarantee your success in this class. You will need to bring mathematical skills and a strong work ethic to the class in order to be successful.

Homework: Students are expected to do all homework assignments. **Late assignments will not be accepted. Assignments are due online using Pearson Access in Canvas.**

Quizzes: There might be unannounced quizzes during the semester and no make-up quizzes will be considered. There will be also quizzes in My Lab and Mastering.

Exams: There will be 4 Exams each worth 100 points. The test dates are listed on the tentative schedule for the class.

There will be no make-up tests, with the exception of absences approved for ASU student activities.

Expected Classroom Behavior: Be sure to arrive on time for class. Excessive tardiness will be subject to sanctions. Under no circumstances should you allow your cell phone to ring during class. Any disruptive behavior, which includes ringing cell phones, listening to your mp3/iPod player, text messaging, constant talking, eating food noisily, or reading a newspaper will not be tolerated.

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Grading:

Homework:	35%
Exams:	65%

This is meant to show the importance of attendance, homework, quizzes, and exams.

Final grades will be assigned according to the following table based on the final distribution of the above weighted averages.

97% - 100%	A+
90% - 96.99%	A
89.50% - 89.99%	A-
87% - 89.49%	B+
80% - 86.99%	B
79.50% - 79.99	B-
77% - 79.49%	C+
70% - 76.99%	C
60% - 69.99%	D
Below 60%	E, EU or EN

Grades: Any grades posted in My Lab and Mastering are informal and is simply a means of communication throughout the semester. It does NOT figure your final grade for the class (that may have different weights, dropping of scores, etc.). You must access your MY.ASU.EDU account for the final class grade.

Tutoring: Tutoring is available online and with restrictions in the Student Success Center. It is located on the first floor of the library at the ASU West Campus.

- The schedule for online tutoring can be found at <https://tutoring.asu.edu/online-tutoring>. Students can view the schedule of when tutors are working via the website above or through [Tutor Search](#).
- ASU also provides counseling, tutoring in math (and many other subjects), supplemental instruction, and other types of support to students. The websites are <https://eoss.asu.edu/counseling> for counseling services, <https://tutoring.asu.edu/> for tutoring including online tutoring, and <https://eoss.asu.edu/cs> for career resources.

Technical Support Contact Information:

For technical assistance 24 hours a day, 7 days a week, please contact University Technology.

Phone: 480-965-6500 or 1-855-278-5080 Email: helpdesk@asu.edu Web: <http://help.asu.edu/>

For information on systems outages, visit the ASU systems status calendar: <http://syshealth.asu.edu/> .

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ASU Academic Integrity - <https://provost.asu.edu/academic-integrity>: Each student has an obligation to act with honesty and integrity, and to respect the rights of others in carrying out all academic assignments. Violations of the University Academic Integrity policy will not be ignored. Penalties include reduced or no credit for submitted work, a failing grade in the class, a note on your official transcript that shows you were punished for cheating, suspension, expulsion and revocation of already awarded degrees. The university requires that the implementation of any of these penalties for violations of the academic integrity policy be reported to the College's Academic Integrity Officer. The Academic Integrity Policy defines the process to be used if the student wishes to appeal this action.

ASU Student Code of Conduct - <https://eoss.asu.edu/dos/srr/codeofconduct>: Students are expected to follow the student code of conduct, especially when communicating with your peers and instructors. Violations of the student code of conduct may result in withdrawal from the class.

Assessments: Please be aware that student scores on exams or other graded work may be used for assessment of program goals of degrees offered by the School of Mathematical and Natural Sciences.

Attendance/Absence Policies: In addition to the instructor's general policy on absences and missed work, excused absences and conditions for making up work include "Accommodation of Religious Practices" (<https://www.asu.edu/aad/manuals/acd/acd304-04.html>) and "Missed Classes Due to University-Sanctioned Activities" (<https://www.asu.edu/aad/manuals/acd/acd304-02.html>). Students must notify their instructors of these absences as early as possible in the semester.

Community of Care Guidelines: ASU's response to COVID-19 and for the preservation and protection of every community member's health will continue to be dynamically adjusted to keep our community healthy and well. In certain indoor settings face coverings will be **required**. Those settings include all classrooms and teaching or research labs. In addition, face coverings will be required in close-quarter environments where physical distancing may not be possible. These include the following:

- All ASU clinical programs and centers that serve the general public, such as the ASU Health Centers, Child Development Laboratory, and Counselor Training Center (the "Programs"), whether on- or off-campus.
- Meeting rooms, workshop, design or production studios, and other indoor settings where social distancing is not possible.
- Office hours
- All other indoor areas designated by posted signage

As the information on status, current risk, and appropriate response continues to evolve, please consult the following websites for the latest guidance and information:

<https://eoss.asu.edu/communityofcare>

<https://www.asu.edu/about/fall-2021#face-coverings>

<https://wellness.asu.edu/community-of-care-coming-to-campus>

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Copyright Infringement: A warning to students that they must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

Course/Instructor Evaluation: The course/instructor evaluation for this course will be typically be conducted online 7-10 days before the last official day of classes of each semester or summer session. Your response(s) to the course/instructor are anonymous and will not be returned to your instructor until after grades have been submitted. The use of a course/instructor evaluation is an important process that allows our college to (1) help faculty improve their instruction, (2) help administrators evaluate instructional quality, (3) ensure high standards of teaching, and (4) ultimately improve instruction and student learning over time. Completion of the evaluation is not required for you to pass this class and will not affect your grade, but your cooperation and participation in this process is critical. About two weeks before the class finishes, watch for an e-mail with "NCIAS Course/Instructor Evaluation" in the subject heading. The email will be sent to your official ASU e-mail address.

Emergencies/Campus Power Outage: In the event of a campus power outage or other event affecting the ability of the University to deliver classes, any decision to cancel classes will be announced using the ASU emergency notification system. For this reason, it is imperative that students register with the ASU emergency notification system at: <https://cfo.asu.edu/emergency-alert>. In cases in which a limited number of buildings are affected, students should check the university website and/or call the School office at (602) 543-6050.

Evacuation Plan: Students should be aware of the evacuation route posted on the exit door of each classroom. Students who cannot walk down stairs should notify the instructor as early in the course as possible so the instructor can provide information regarding the location of the designated meeting area on each upper floor of the building (marked with a blue sign that states Emergency Evacuation Response Area).

Final Exam Make-up Policy: The final exam schedule listed in the Schedule of Classes will be strictly followed. Exceptions to the schedule and requests for make-up examinations can be granted only by the Associate Director of the School of Mathematical and Natural Sciences for one of the following reasons: 1) religious conflict; 2) the student has more than three exams scheduled on the same day; 3) two finals are scheduled to occur at the same time. Make-up exams will NOT be given for reasons of non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, or other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and makeup the final within one calendar month. The student must provide written documentation and be passing the class at the time to receive an incomplete. A signed "Request for Grade of Incomplete" must be submitted by the student and approved by the student's instructor and the Associate Director of the School of Mathematical and Natural Sciences.

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Incomplete: A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents a student who is doing acceptable work from completing a small percentage of the course requirements at the end of the semester. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. **A grade of incomplete will NOT be awarded unless there is documented evidence of extreme personal or immediate family hardship.** Changes in work hours, child-care emergencies, or other similar personal problems will not be approved as reasons for awarding incompletes. The Associate Director of the School of Mathematical and Natural Sciences must approve any incomplete grade requests.

Policy against Threatening Behavior - <http://www.asu.edu/aad/manuals/ssm/ssm104-02.html>:

In the classroom and out students are required to conduct themselves in a manner that promotes an environment that is safe and conducive to learning and conducting other university-related business. All incidents and allegations of violent or threatening conduct by an ASU student will be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. Such incidents will be dealt with in accordance with the policies and procedures described in Section 104-02 of the Student Services Manual.

Potentially Offensive Content: If you find any of the content of this class offensive, please bring your concerns to the instructor immediately. If raising the issue with the instructor is problematic, these concerns should be brought to the attention of the Director and Associate Director of the School of Mathematical and Natural Sciences.

Reasonable Accommodations for Students with Disabilities: The Disability Resource Center (DRC) provides information and services to students with any documented disability who are attending ASU West. Individualized program strategies and recommendations are available for each student as well as current information regarding community resources. Students also may have access to specialized equipment and supportive services and should contact the instructor for accommodations that are necessary for course completion.

Respectful Communications: As a beacon for critical thought and the advancement of knowledge, ASU values dissenting opinions. Acknowledging that someone else's opinion matters as much as our own is the first step to creating a respectful dialogue. However, we must also distinguish between opinion, fact, and policy. Valuing and respecting those opinions that are different from our own does not mandate acquiescence or violation of policy. We expect all communications, written, email, verbal, and otherwise to be conducted with a respectful tone and tenor, and in compliance with established protocols and the ASU Code of Conduct.

(<https://eoss.asu.edu/dos/srr/codeofconduct>)

Title IX: Is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at

<https://sexualviolenceprevention.asu.edu/faqs>

As mandated reporters, faculty are obligated to report any information of which they become aware regarding alleged acts of sexual discrimination, including sexual violence and dating

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violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.

Withdrawals: Specifically, students should be aware that non-attendance will **NOT** automatically result in their being dropped from the course. Therefore, if a student does not attend class during the first week or for any extended period of time during the semester, they should not presume that they are no longer registered. ***It is the student's responsibility to be aware of their registration status.***

See ASU Full Calendar: <https://students.asu.edu/academic-calendar#fall2021>

Classes Begin	Session C August 19, 2021
<u>Last Day to Register or Drop/Add Without College Approval</u>	Session C August 25, 2021
Tuition & Fees 100% Refund Deadline - For more information see <u>Tuition and Refund Policy</u> . Note: If you choose to <u>drop a class</u> or <u>withdraw from ASU</u> after this deadline, you may receive a bill for the financial aid used to cover those classes.	Session C September 1, 2021
Labor Day Observed - <i>Classes excused/University closed</i>	Session C September 6, 2021
Fall Break – <i>Classes excused/University open</i>	October 9 – 12, 2021
<u>Course Withdrawal Deadline*</u>	Session C November 3, 2021
Veterans Day Observed – <i>Classes excused/University closed</i>	Session C November 11, 2021
Thanksgiving Holiday Observed – <i>Classes excused/University closed</i>	Session C November 25 - 26, 2021

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<u>Complete Session Withdrawal Deadline*</u> As part of a complete session withdrawal a student must withdraw from all classes in a session. Beginning the first day of classes, undergraduate students are required to contact their college/school to facilitate the withdrawal process. For more information click here .	Session C December 3, 2021
Classes End/ Last Day to Process Transactions (Session B ASU Online & iCourses may end Tuesday, 4/27/2021)	Session C December 3, 2021
Study Days	Session C December 4-5, 2021
<u>Final Exams</u>	Session C December 6-11, 2021
Final Grades Due	Session C December 6-13, 2021

Any withdrawal transaction must be completed by the deadline date in accordance to the appropriate session at the registrar's office. If not, you will still be officially enrolled and you will receive a grade based on your work completed.

*As part of a complete session withdrawal a student must withdraw from all classes in a session. Beginning the first day of classes, undergraduate students are required to work with a Student Retention Coordinator to facilitate the withdrawal process. Please refer to <https://students.asu.edu/StudentRetention>

For additional information about ASU's withdrawal policy and the possible consequences of withdrawing from a class, contact Registration Services or your academic counselor.

MAT 119 Tentative Schedule

Week	Date	Sections/Tasks
1	Aug 19 – Aug 20	Make sure we can navigate Canvas properly
2	Aug 23 Aug 25	Introduction 3.1 Simple Interest
3	Aug 30 Sept 1	3.2 Compound, Continuous Interest 3.3 Future Value, Sinking Value

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4	Sept 6 Sept 8	Labor Day 3.4 Present Value, Amortization
5	Sept 13 Sept 15	3.4 Present Value, Amortization Continued Exam #1 Review
6	Sept 20 Sept 22	EXAM #1 7.2 Sets
7	Sept 27 Sept 29	7.3 Basic counting Principles 7.4 Permutations & Combinations
8	Oct 4 Oct 6	EXAM #2 Review Exam # 2
9	Oct 11 Oct 13	Fall Break 8.1 Sample Space, events & Prob.
10	Oct 18 Oct 20	8.2 Union, Intersection & complements of events 8.3 Conditional Probability
11	Oct 25 Oct 27	8.4 Bayes Formula 8.5 Random Variable
12	Nov 1 Nov 3	Exam #3 Review Exam #3
13	Nov 8 Nov 10	10.1 Graphing Data 10.2 Measure of Central Distribution
14	Nov 15 Nov 17	11.3 Measure of Dispersion 11.4 Bernoulli Trials and Binomial Distribution
15	Nov 22 Nov 24	11.5 Normal Distribution Exam #4 Review
16	Nov 29 Dec 1	Exam #4 Review Exam #4

The tentative schedule is subject to change in order to meet the needs of the class.

End of Syllabus!!

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