

MAT 119 Online: Finite Mathematics
Syllabus for Spring 2019, Session A
Class Numbers 11596 (ASU Online) & 13262 (iCourse)

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Online Office Hours: T & Th 1:30 – 2:30pm. If you would like to meet online, email me so that we can set up an appointment and I can send you a link to go to and meet through connect.asu.edu or Skype

Textbook: NOT Required

Required: Unused Pearson MyMathLab access code (This provides you with the required e-book)

Optional: *Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th Edition, by Barnett, Ziegler, and Byleen, published by Pearson* (If you decide to get the textbook, get the package including an unused MyMathLab access code so that you don't have to buy it separately)

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 written and timed assuming each student has a TI-83/84 calculator and knows how to use it as demonstrated in the lectures.***

Webcam & Microphone: Remote exam proctoring (RPnow), which is required for all exams, requires a computer with a webcam and microphone. Working webcam & microphone on your laptop or desktop are fine. If you don't have that, you will need an external plug-in webcam & microphone.

Course Communications: If you wish to contact me directly with questions regarding personal information such as your grade or personal circumstances that you do not wish to share with the entire class, send me an email using Blackboard's Course Tool\Send Email link or use the email above.

Office Hours: I can meet with students online via a web meeting. To schedule a meeting, send me an email with a subject of "MAT 119 Online Office Hour Request." Once we have agreed upon a mutually convenient day and time, I will set up an Adobe Connect Internet meeting and send you the URL access link.

If you are in the Phoenix area and want to meet with me in my office on the West Campus, my office is CLCC 266. Please send me an email to let me know with a proposed meeting date and time.

Prerequisites: A student entering MAT 119 is expected to have completed College Algebra (MAT 117) or its equivalent with a grade of A, B, or C.

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. 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.

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

Preparation and Homework: Students are expected to **study first** by watching the videos that supplement the lecture notes. For additional explanation, the student has access to reading the assigned sections in the e-book in MyMathLab and making use of the short videos available in it (look for a video icon as you are reading).

Then students are expected **to do all homework assignments on time** (also, for additional studying and practice, you can use the “view an example” or “help me solve this” as visual aids to work homework exercises, but make sure you work on understanding every step in each exercise thoroughly so that you retain the material for exams). ***Late assignments will not be accepted.***

Assignments are due online using MyMathLab. To enroll follow the instructions on the ‘Homework: Registration & Directions’ tab in Blackboard. Due dates for homework assignments are available in MyMathLab. Your **lowest 3 homework scores will be dropped** when determining your homework average at the end of the semester. **Your homework average is 25% of the overall grade.**

Practice Quizzes: There will be 6 practice quizzes to narrow down a study guide for the exams to be taken in MyMathLab (two quizzes for each unit exam). You are able to take each one several times to study and all the visual aids like “view an example”, etc. will be turned off, but they will be turned on in Review mode (when you have completed the quiz you are able to review the quiz).

After reviewing and studying each exercise you can go back and re-take each of the quizzes several times. Quizzes are different than homework, you must work each problem in order, but you can go out of the quiz and complete it at a later time (it will resume from where you left off), once you have completed the quiz you must submit it to get credit for the work (otherwise you will see ‘incomplete’ message when you review your grade).

Please note that the highest score will be recorded in the final grade. The **lowest quiz score, of the 6 quizzes, will be dropped** when figuring your final grade. **The quiz average is 15% of your overall grade.**

Exams: There will be three (3) exams. All exams require a webcam & microphone. You will then be able to re-take the exam for a better score but again only one set of answers will be allowed. You will receive the best score of the 2 (if you re-take the exam). You must take the first and second exam within the given due dates.

See exam dates, exams are due by 11:59pm on the due date. Please plan accordingly (time constraints), the exam will close at 11:59pm no matter how much time you have.

Exams will be given online on MyMathLab. Each exam will be automatically timed and, unlike the homework problems, you can only access the exam once and submit only one set of answers. If you do not complete an exam in the time allowed, the exam will automatically close and be submitted for grading as is. The exam schedule is listed on the schedule page. **There will be no make-up exams given.** Your exam average is 60% of your overall grade, so each exam counts 20% of your overall grade.

- This course uses online proctoring that requires a laptop or desktop. Tablets, Hybrid Devices, and Mobile Devices are not supported. External Camera's on Mac's aren't supported. And you need the latest version of Flash.
- You can find the detailed requirements at:
<http://clientportal.softwaresecure.com/support/index.php?/Knowledgebase/Article/View/252/0/system-requirements-remote-proctor-now>
- You must verify that you have access to a computer system that meets the requirement for Software Secure
- GOOD INTERNET CONNECTION, WEBCAM AND MICROPHONE ARE REQUIRED TO TAKE THE EXAM.
- For each exam you are allowed:
 - You must show identification for each exam (student ID, driver's license, Military ID, something with a picture)
 - Calculator from the approved list on the syllabus.
 - Plain scratch paper for calculations.
 - No notes are permitted (exam 1 you are allowed 3X5 handwritten note card, and Final exam you are allowed 8 ½ X 11 handwritten page of notes, these will be announced prior to exam)
 - There will be NO browsing the web.

Extra OPTIONAL Final Exam: This cumulative final exam is for students that need to improve their grade and/or who have missed a regular exam. This is **not** extra credit, it will replace a missing exam and/or the lowest exam score (if better) when calculating your final grade. You will only be able to take this exam once and submit only one set of answers.

This is a longer exam and you will be allotted 2 hours for this exam. You will be allowed one page of notes (8 ½ x 11 sheet of paper, handwritten, front and back). There will be 2 extra quizzes on MyMathLab to help you prepare for this exam, those extra quizzes are not for credit (they are just for you, to help you prepare for the final exam, only final exam questions

will come from those extra quizzes). It was not the intent of the instructor for students to take this final exam but necessary for some students (missing exam, low exam scores, etc.)

Summary:

Grading Weights: The homework, quizzes and exams will be weighted as follows:	
3 Exams: Only 3 exams scores are used to calculate your final grade, if you are satisfied with your grade there is no need to take the extra optional final exam (that test is intended to help students improve their grade and/or make-up for a missed exam).	60%
Homework: Your 3 lowest homework assignments will be dropped when figuring your final grade.	25%
Practice quizzes: Your lowest quiz score will be dropped when figuring your final grade.	15%

Grades: Homework Average is 25%, Quiz Average is 15%, and Exam Average is 60%.
Final grades will be assigned according to the following table:

Letter Grade	Final Average Required	Grade Points assigned for GPA Calculation	Letter Grade	Final Average Required	Grade Points assigned for GPA Calculation
A+	97%	4.33	B -	80%	2.67
A	93%	4.00	C+	77%	2.33
A -	90%	3.67	C	70%	2.00
B+	87%	3.33	D	60%	1.00
B	83%	3.00	E	<60%	0.00

MAT119 Dates and Assignments are tentative: Students will be notified of any syllabus changes via email or in course site announcements. Please remember to check your ASU email and announcements in Blackboard.

Weekly Course Schedule: A homework assignment is due for every section covered. It is named HW 3.1 for section 3.1 in the book (e-book), HW 3.2 for section 3.2 and so on. These assignments (with their due dates) are found under the 'Assignments' tab in MyMathLab.

All homework assignments and quizzes have due dates that are scheduled Monday – Friday (not able to do that for all exams). The intent (class structure) is for 3 sections then a quiz and 2 quizzes then an exam. I leave the quizzes open until the exams due dates give you extra practice/study time.

Week	Sections	Due
Week 1 1/7 – 1/19	Getting Started, MyMathLab registration, Introductory video, Syllabus, Navigation through the Blackboard course shell 3.1 Simple interest 3.2 Compound, Continuous interest 3.3 Future value, Sinking funds	1/7 1/8 1/9
Week 2 1/20 – 1/26	QUIZ 1a 3.1 – 3.3 3.4 Present value, Amortization 7.2 Sets 7.3 Basic Counting Principles	1/10 1/12 1/15 1/16
Week 3 1/27- 2/2	QUIZ 1b 3.4 – 7.3 EXAM 1 (over sections 3.1- 3.4, 7.2- 7.3) 7.4 Permutations and Combinations 8.1 Sample Spaces, Events and Probability	1/18 1/21 1/22 1/23
Week 4 2/3 – 2/9	8.2 Union, Intersection, and Complements, Odds QUIZ 2a 7.4 – 8.2 8.3 Conditional Probability, Independence 8.4 Bayes' Formula	1/25 1/26 1/29 1/30
Week 5 2/10 – 2/16	8.5 Random Variable, Expected Value QUIZ 2b 8.3 – 8.5 EXAM 2 (over sections 7.4, 8.1-5) 11.1 Graphing Data	2/1 2/2 2/4 2/6
Week 6 2/17 – 2/23	11.2 Measures of Central Tendency 11.3 Measures of Dispersion QUIZ 3a 11.1 – 11.3 11.4 Bernoulli Trails and Binomial Distributions	2/7 2/8 2/9 2/13
Week 7 2/24- 2/26	11.5 Normal Distributions QUIZ 3b 11.4 – 11.5 EXAM 3 (over sections 11.1-11.5) Cumulative Final Exam	2/19 2/20 2/22 2/26

A copy of the scheduled due dates for each homework assignment and exam is posted on Blackboard under Course Outline & Schedule. Any changes to the schedule will be communicated through a Blackboard Announcement and email. **The controlling due date and time for each homework assignment is always the date on Pearson MyMathLab.** After the due date and time listed on MyMathLab has passed, you will be able to access the homework to review and see what problems you missed but you will not be able to make any changes to any homework submission.

Tutoring: As an ASU student, FREE tutoring is available for you, on campus or online (Go to <https://tutoring.asu.edu/> or to <https://studentsuccess.asu.edu/> for information).

Also, since you are using MyMathLab, you can also register for the Pearson Tutor Services, but fees might be applicable with this service.

Piazza Code of Conduct: Piazza is an online forum site specifically created for math and science courses. It features a clean interface that makes following threads easier, the threads are sortable and searchable, and provides the ability to enter symbolic mathematics. It is a collaborative site in which students are encouraged to post questions and other students are encouraged to offer assistance. The instructor and teaching assistants monitor Piazza regularly, offering feedback whenever necessary. Piazza is built into every online course shell and is a required aspect of the course. The instructor may also post messages to the class in this site. Thus, it is the student's responsibility to be properly signed up in Piazza as directed by the instructor.

- All questions related to classwork should be posted to Piazza. Any homework or classwork questions emailed directly to the instructor will not be answered.
- Please include the assignment name and question number in the header (e.g. Set Operations, #7).
- Please include a couple lines of your work. You may also photograph your written work and insert the image within the post. Please trim the image size if possible.
- Please be courteous at all times. No vulgar, demeaning, or aggressive language will be tolerated.
- Do not use Piazza to air grievances or to campaign.
- Do not use Piazza for personal messages. Those should be sent by email to the instructor directly.
- Stay on topic. Do not use Piazza for discussions not related to this class.
- Keep a civil and friendly atmosphere. Piazza works best when there are a lot of students willing to engage the forum.
- Please do not expect immediate replies. Instructors usually check the forum daily. In the meantime, other students are encouraged to add feedback and commentary. Instructors may also deliberately stay in the background so as to promote student-led discussions. Failure to adhere to these requirements may result in your posting privileges being revoked.

FERPA Statement: Because of the nature of the online course, the method of delivery contains specific online methodologies. The student accepts the following as a normal and necessary part of this online course:

- Correspondence will be transacted by email using ASU.edu email addresses. Also, you might receive emails about your performance, or other issues concerning this class, through MyMathLab using the email you input when registering for MyMathLab. Use your ASU email when creating your account for MyMathLab.

- If a request for information is sent to the instructor from an email address, the response will be returned to that same email address.
- The student's ASU email address or the email address used in MyMathLab (if different) will be listed as contact information within the course.
- Discussion Board participation will include a reference to the student's identity.
- Use of video conferences (online office hour), discloses the student's identity to others.

ASU and School of Mathematical and Nature Sciences Policies

Course/Instructor Evaluation

The course/instructor evaluation for this course will 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.

Withdrawals: It is the student's responsibility to be aware of their registration status.

Withdrawals pertaining to students enrolled in MAT 117 or MAT 142: please note that instructors may choose to drop a student from this course if the student appears on the grade roster and does not attend class the first week of the semester; however, students should be aware that non-attendance may 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.

Withdrawals pertaining to students enrolled in all other courses: 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

Please note the following dates:

Session Date & Deadlines	Session A 01/07/2019 – 02/26/2019	Session B 03/11/2019- 04/26/2019	Session C 01/07/2019 – 04/26/2019 (Final Exams 04/29/2019 – 05/04/2019)
Classes Begin	January 7, 2019	March 11, 2019	January 7, 2019
Drop/Add Deadline (w/out College approval)	January 8, 2019	March 12, 2019	January 13, 2019
Tuition & Fees 100% Refund Deadline	January 13, 2019	March 17, 2019	January 20, 2019
Martin Luther King, Jr. Holiday Observed – University Closed	January 21, 2019	January 21, 2019	January 21, 2019
University 21st Day	January 28, 2019	April 1, 2019	January 28, 2019
Deadline to Apply for Graduation	February 15, 2019	February 15, 2019	February 15, 2019
University 45th Day	February 20, 2019	February 20, 2019	February 20, 2019
Tuition Fee Payment Deadline (registration from 1/19/2019 through 2/18/2019)	February 25, 2019	February 25, 2019	February 25, 2019
Course Withdrawal Deadline	January 25, 2019	March 29, 2019	March 31, 2019
Spring Break – Classes Excused	March 3-10, 2019	March 3-10, 2019	March 3-10, 2019
Tuition Fee Payment Deadline (registration from 2/19/2019 through 3/18/2019)	March 25, 2019	March 25, 2019	March 25, 2019
Complete Session Withdrawal Deadline	February 26, 2019	April 26, 2019	April 26, 2019
Classes End/Last Day to Process transactions	February 26, 2019	April 26, 2019	April 26, 2019
Study Days	N/A	N/A	April 27-28, 2019
Final Exams	Last day of classes	Last day of classes	April 29-May 4, 2019
Final Grades Due	March 1, 2019	April 29-May 6, 2019	April 29-May 6, 2019
Commencement	May 6, 2019	May 6, 2019	May 6, 2019
Degree Conferral Date	May 6, 2019	May 6, 2019	May 6, 2019
Grade Replacement/Academic Standing Processing	May 7-8, 2019	May 7-8, 2019	May 7-8, 2019

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 <http://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.

Students are responsible for their registration status!

The Grade of 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 Director of the School of Mathematical and Natural Sciences must approve all incomplete grade requests.

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.

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.

Academic Integrity and Code of Conduct:

As defined in the ASU Student Academic Integrity Policy:
<http://provost.asu.edu/academicintegrity>.

Each student has an obligation to act with honesty and integrity, and to respect the rights of others in carrying out all academic assignments. A student may be found to have violated this obligation and to have engaged in academic dishonesty if during or in connection with any academic evaluation, he or she:

- Engages in any form of academic deceit;
- Refers to materials or sources or employs devices (e.g., audio recorders, crib sheets, calculators, solution manuals, or commercial research services) not authorized by the instructor for use during the academic evaluation;
- Possesses, buys, sells, obtains, or uses, without appropriate authorization, a copy of any materials intended to be used for academic evaluation in advance of its administration;
- Acts as a substitute for another person in any academic evaluation;
- Uses a substitute in any academic evaluation;

- Depends on the aid of others to the extent that the work is not representative of the student's abilities, knowing or having good reason to believe that this aid is not authorized by the instructor;
- Provides inappropriate aid to another person, knowing or having good reason to believe the aid is not authorized by the instructor;
- Engages in plagiarism;
- Permits his or her work to be submitted by another person without the instructor's authorization; or
- Attempts to influence or change any academic evaluation or record for reasons having no relevance to class achievement.

MAT 119 follows the ASU Academic Integrity Policy in the administration of all course examinations and 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 Dean's office. The Integrity Policy defines the process to be used if the student wishes to appeal this action.

In MAT 119 you are expected to follow the *ASU Student Code of Conduct* (<http://students.asu.edu/srr/code>) especially when communicating with your peers, instructors, and teaching assistants. Violations of the student code of conduct may result in withdrawal from the class.

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.

Missed Work/Exam Make-up Policy: Due dates for assignments and exam dates are not flexible. Late work will not be accepted, and missed exams cannot be made up, without prior approval of the instructor and without appropriate documentation of a medical or other emergency. The instructor has the right to deduct 10% of the value of the assignment, per day, for any late work or exams that are accepted. The instructor also may add additional provisions to this policy as dictated by course requirements.

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 director of the School of Mathematical and Natural Sciences for one of the following reasons:

- 1) religious observances
- 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 Director of the School of Mathematical and Natural Sciences.

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.

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

If you find it necessary to leave a note for this instructor, please contact the administrative reception desk of the School of Mathematical and Natural Sciences located at CLCC II 265

Title IX:

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>

Recording of Lectures:

Our aim is to create a learning environment where all feel free to contribute; thus any recording of class sessions is prohibited (with the exception of those who have a DRC-approved accommodation), and no one should post any verbatim accounts of class discussion or say anything that could identify a class member on social media without the express permission of the course instructor.

Policy against Threatening Behavior:

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 (<http://www.asu.edu/aad/manuals/ssm/ssm104-02.html>).

Potentially Offensive Content:

A notification such as the following should be included in the syllabus if appropriate for the class in question.

If you find any of the content of his class offensive, please bring your concerns to the instructor immediately.

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.

Emergency 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).