

MAT 119 Online: Finite Mathematics
Syllabus for Spring 2014, Session A
Class Numbers 12500 & 16043

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Course Communications

The primary on-line communication tool is the course home page on LearningStudio assessed through My ASU/My Classes/Finite Mathematics. Announcements, narrated lecture notes, example problems, supplementary material and exams will be posted there.

General questions about the course and specific questions about the lectures or homework problems should be posted online using the appropriate LearningStudio discussion link so they can be seen by everyone. If I receive any of these types of questions via e-mail, I will instruct you to post it online where I will answer it for everyone.

For 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 e-mail. For all e-mails, include "MAT 119 Online" on the subject line. I cannot research a question and find an answer if I do not know who you are and which of my classes you are in.

If you contact me by phone, please leave a detailed voice message including your name, call-back number and that you are in my MAT 119 Online class.

Office Hours: I can meet with students online via a web meeting. To schedule a meeting, send me an e-mail 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, send me an e-mail request with a proposed meeting date and time.

Course Information

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.

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 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 word problems in finance, sets, counting, probability and probability distribution.

eBook: You gain access to the online textbook (*Finite Mathematics For the Managerial, Live, and Social Sciences*, 10th Edition; by Soo T. Tan, Brooks/Cole, Cengage Learning) when you purchase the required Enhanced WebAssign access. WebAssign access can be purchased directly from WebAssign at www.webassign.net with a credit card or PayPal or by purchasing an Enhanced WebAssign access card from the ASU Bookstore which is the officially listed required "book" on My ASU.

General Course Outline: Tan's *Finite Mathematics*, 10th Edition

| Unit: Topic | Chapter.Section: Subject | Homework/Exams | |
|---|--|----------------|--------------|
| | | Posted | Due |
| <i>1: Mathematics of Finance</i> | 5.1: Compound Interest | 1/13 | 1/22 |
| | 5.2: Annuities | 1/13 | 1/22 |
| | 5.3: Amortization and Sinking Funds | 1/13 | 1/22 |
| | Exam 1 on Mathematics of Finance | 1/22 | 1/23 |
| <i>2: Sets & Counting</i> | 6.1: Sets & Set Operations | 1/23 | 2/3 |
| | 6.2: The Number of Elements in a Finite Set | 1/23 | 2/3 |
| | 6.3: The Multiplication Principle | 1/23 | 2/3 |
| | 6.4: Permutations & Combinations | 1/23 | 2/3 |
| | Exam 2 on Sets & Counting | 2/3 | 2/4 |
| <i>3: Probability</i> | 7.1: Experiments, Sample Spaces, and Events | 2/4 | 2/11 |
| | 7.2: Definition of the Probability | 2/4 | 2/11 |
| | 7.3: Rules of Probability | 2/4 | 2/11 |
| | 7.4: Use of Counting Techniques in Probability | 2/4 | 2/20 |
| | 7.5: Conditional Probability & Independent Events | 2/4 | 2/20 |
| | 7.6: Bayes' Theorem | | |
| | Exam 3 on Probability | 2/4 2/20 | 2/20 2/21 |
| <i>4: Probability Distribution & Statistics</i> | 8.1: Distributions of Random Variables | 2/21 | 2/26 |
| | 8.2: Expected Value | 2/21 | 2/26 |
| | 8.3: Variance and Standard Deviation | 2/21 | 2/26 |
| | 8.4: The Binomial Distribution | 2/21 | 3/3 |
| | 8.5: The Normal Distribution | 2/21 | 3/3 |
| | 8.6: Applications of the Normal Distribution | 2/21 | 3/3 |
| | Exam 4 on Probability Distribution & Statistics | 3/3 | 3/4 |

A copy of the scheduled due dates for each homework assignment and exam is posted on LearningStudio under "Course Outline & Schedule" as well as within each unit. Any changes to the schedule will be communicated through LearningStudio, WebAssign, and/or e-mail announcements.

The controlling due date and time for each homework assignment is the WebAssign date.

After the due date and time listed on WebAssign has passed, you will not be able to access the homework to make any additions or changes to any homework question.

Exams are given in LearningStudio and can only be taken during the scheduled access dates.

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 lecture notes, example problems, and in the eBook under *Using Technology*.

Grading System

Grades are based on evaluations of your performance on homework and exams. There is **no extra credit** for anyone for any reason. Also, no points are given for "effort." I have no way of measuring each students "effort" and therefore do not consider it an appropriate evaluation tool for college level work. I assume all students make a conscientious effort to do the work assigned. The same criteria, summarized below, will be used for each student's grade without exceptions.

Homework Assignments: Homework assignments will be posted, completed, and graded on WebAssign. Directions for registering on WebAssign are given in the Start Here section of the LearningStudio course home page.

Homework assignments provide practice in the topics covered in the course material. In most cases, the online homework will be set up to allow you four attempts. After a homework assignment is due, you will be able to view the solutions online but will not be able to change any answers.

There are no make-up homework assignments. As an online student, you have the responsibility to manage your own time to complete all assignments by the due date. Homework assignments are posted in groups of exercises with three to four assignments due on the same day. It is never good time-management to leave all of assignments until the last day or even the last weekend before they are due. Any assignment not completed by the due date will be graded as is.

If you have a question on any homework problem, post it in LearningStudio under *Homework Discussion* and follow the directions for the subject of your post.

Exams: There will be four (4) exams. Exams will be given online in LearningStudio using a special feature that will prevent you from printing or navigating away from the exam.

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 will be submitted for grading as is.

As an online student, it is assumed you have access to a reliable and stable internet connection. This is especially important during an exam. (Wi-Fi is inherently unstable.) You will not be given a second access to an exam if you accidentally do something like try to click on a new link or close the special exam browser during the exam that causes you to lose your connection. In such a case, the exam will automatically close and be graded. Any claim that you lost your internet connection will only be considered if you provide technical verification from your ISP.

Grading Weights: The homework and exams will be weighted as follows:

| Unit | Percent of Final Grade | | Total |
|--|------------------------|------|-------|
| | Homework | Exam | |
| 1: Mathematics of Finance | 3% | 12% | 15% |
| 2: Sets & Counting | 4% | 16% | 20% |
| 3: Probability | 7% | 28% | 35% |
| 4: Probability Distribution & Statistics | 6% | 24% | 30% |
| Total | 20% | 80% | 100% |

Final Grade: Your final letter grade will be based on the following percentages with possible slight adjustments based on the final distribution of final weighted averages.

| 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 |

ASU and Division of Mathematical and Natural 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 the 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 e-mail will be sent to your official ASU e-mail address.

Withdrawals: The instructor will **NOT** withdraw students for any reason. Specifically, students should be aware that non-participation will **NOT** automatically result in their being dropped from the course. Therefore, if a student does not participate in the class during the first week or for any extended period of time during the session, 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 for Session A:

| Session Date & Deadlines | Session A (7.5 Weeks) Jan. 13-Mar. 4, 2014 | Session B (7.5 Weeks) Mar. 17-May 2, 2014 | Session C (15 Weeks) Jan. 13-May 2, 2014 |
|--|---|--|---|
| Classes Begin | January 13, 2014 | March 17, 2014 | January 13, 2014 |
| Drop/Add Deadline | January 14, 2014 | March 18, 2014 | January 19, 2014 |
| Tuition & Fees 100% Refund Deadline | January 19, 2014 | March 23, 2014 | January 26, 2014 |
| Martin Luther King Jr. Holiday Observed - University Closed | January 20, 2014 | | |
| University 21st Day | February 3, 2014 | April 7, 2014 | February 3, 2014 |
| Course Withdrawal Deadline * | February 2, 2014 | April 6, 2014 | April 6, 2014 |
| Complete Session Withdrawal Deadline * | March 4, 2014 | May 2, 2014 | May 2, 2014 |
| Deadline to Apply for Graduation | February 17, 2014 | | |
| Spring Break – Classes Excused | March 9-16, 2014 | | |
| Last Day of Classes/Process Transactions | March 4, 2014 | May 2, 2014 | May 2, 2014 |
| Reading/Study Day | N/A | N/A | May 3-4, 2014 |
| Final Exams | Last day of class | Last day of class | May 5-10, 2014 |
| Final Grades Due | March 7, 2014 | May 7, 2014 | May 7-13, 2014 |

Any withdrawal transaction must be completed by the deadline date in 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.

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 have the DRC 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.

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