Course Description

Linear equations and inequalities, exponents and logarithms, matrices and determinants, linear programming. Applications.

Textbook

Applied Finite Mathematics by Edmond C. Tomastik and Janice L. Epstein (2nd Edition)

A WebAssign access code comes with the text purchased from the bookstore. An electronic version of the text is available from WebAssign. However, it is strongly recommended you purchase the text from the bookstore. Issues can arise from purchases from other than the bookstore and will not be supported.

Course Objectives

- Understanding and application of practical mathematics.
- Translating real-life problems into mathematical format (and then solving them).
- Independent learning.

Attendance

In accordance with senate rules, students are not required to attend class, and faculty may not reduce a student's grade simply because of an absence. In addition to student government policies, the threat of COVID-19 may make you very uncomfortable physically coming to class. I will broadcast classes remotely through Husky CT. However, this is secondary support and may not be as rich of an experience as attending in class.

All tests will be taken in person.

Grading

Course grade will be based on assessment in the following areas:

- Homework – 25%
- Exams – 40%
- Quizzes – 25%
- Class participation – 10%

Homework and Quizzes

Homework and quiz due dates are announced well in advance. Absolutely no assignment will be accepted past the deadline. However, one homework assignments can be missed without penalty and the lowest quiz grade will not be included in your quiz average.

Homework assignments are graded as complete/incomplete. To receive a grade of complete, you need to score at least 70% on the WebAssign assignment. Homework will be reviewed at the beginning of the week. If you volunteer to show the solution to a problem to the class, you will receive a grade of completed on that assignment. However, you can only do this on three assignments. If you are chosen to present the solution to the class, you will receive additional homework points based on the quality of your presentation. If you are presenting remotely, you will need to have a picture of your work loaded onto your computer so that your screen can be shared with the rest of the class as you present your solution. You could also turn in hand-written homework at the beginning of class. Note the guidance for work organization posted on Husky CT.

The maximum average for homework is 100% (i.e., you cannot get more than 25 percentage points towards your overall grade from homework).

I recognize the idiosyncrasies with WebAssign and the very particular way the computer will accept answers. For homework, simply move on to the next problem. That is why you only need to complete 70% of the assignment to be considered as having finished it.

For quizzes only, if you come across the scenario where you believe you have entered the correct answer but WebAssign will not accept your answer, you can request the instructor to manually review a specific problem through a WebAssign message. You must use WebAssign messaging to request a review of one of your quiz answers. The instructor can manually review your answer and if consistent with the correct answer, provide credit for that problem (Note: Reporting a problem with a quiz is the *only* circumstance where you use WebAssign messaging. Otherwise, use email to communicate with the instructor).

Tests and Final Exam

Tests will be given in-person during class. A week is set aside for each test to allow for any over-run in the schedule or to allow one full class period for review prior to the test. Tests will be closed book but a formula sheet will be provided in advance of the exam.

If you are going to miss a test, you must notify the instructor *ahead* of time and schedule an alternative time to take the test *prior to* the scheduled test date. You must give the instructor at least 24 hours' notice before the alternative test date you propose.

The final exam will be optional. The final exam will be comprehensive. If you take the final exam and score higher than any test during the semester, any test score that is lower than your final exam score will be replaced with your final exam score. If you score lower on the final exam than the tests taken during the semester, your test scores will not be changed.

Class Participation

At the end of the semesters, students will be qualitatively assessed for their contributions to the overall classroom experience for all students in the class. This includes keeping up with the assignments, appropriate etiquette and participation in discussions that enhance the learning experience for all students. Students showing exceptional knowledge of the material and ability and willingness to work well with others will have their efforts reflected in their participation grade. This will be difficult to assess for those students that predominantly participate remotely.

Calculator Policy

A scientific or graphing calculator is allowed for all tests, exams, quizzes, and homework (For instance a TI-84 or equivalent). You will **not** be able to use the calculator on your phone during a test or exam.

Cell Phones

Cell phones are not to be seen or heard at all during class.

Supplemental Material

Not all material will be presented in class. There will be supplemental material posted on Husky CT. The textbook also provides another perspective for presenting the material.

Getting Help

Additional help is available from the instructor, the student support services, and the Academic Center. A questionnaire has been posted on Husky CT to determine times for extra help sessions on a regular basis with the instructors. An additional time can be scheduled with the instructor. The instructor will ask if other students can be invited to these additional sessions.

Schedule

Week	Section	Topic
24 Jan	1.1	Mathematical Models
	1.2	Systems of linear Equations
31 Jan	F1	Simple interest and discount
	F2	Compound interest
	F3	Annuities
	F4	Present value of Annuities and Amortization
7 Feb	1.3	Gauss Elimination for system of Linear Equations
	1.4	System of Equations with Non-Unique Solutions
14 Feb		**Exam I**
21 Feb	3.1	Linear Programming Problems
	3.2	Graphing Linear Inequalities
	3.3	Graphical Solutions of linear programming problems
28 Feb	2.1	Introduction to Matrices
	2.2	Matrix Multiplication
	2.3	Inverse of a Square Matrix
7 Mar		**Exam II**
14 Mar		Spring Break
21 Mar	4.1	Introduction to sets
	4.2	The number of elements in a set
	4.3	Sample Spaces and Events
	4.4	Basic Probability
	4.5	Rules for Probability
28 Mar	5.1	Multiplication Principle and Permutations
	5.2	Combinations
	5.3	Probability Applications of Counting Principles
4 Apr		**Exam III**
11 Apr	4.6	Conditional Probability
	4.7	Bayes' Theorem
18 Apr	6.1	Random Variables and Histograms
	6.2	Measure of Central Tendency
	6.3	Measure of Spread
25 Apr		**Exam IV**
2 May		**Final Exam Week: TBA**

UCONN Policies:

- **Honor Code**
  UCONN has exceptionally high expectations for its students, both scholastically and ethically. As a UCONN student, it is your job to uphold the course's honor code, both by your own actions and by reporting violations.

  Student problem sets and exam solutions are to represent the sole intellectual effort of the student submitting the work. This precludes usage or adaptation of material from the internet, peers, etc. Students are encouraged to collaborate on lab assignments; the final submitted product, however, must be prepared by the student submitting the work.

  Plagiarism and academic misconduct are extremely serious and will be aggressively pursued by course staff according to university regulations. See http://community.uconn.edu/the-student-code-preamble/

  Academic dishonesty can be investigated on any assignment any time throughout the semester. This includes up to, including, and beyond submission of final grades.

- **Policy Against Discrimination, Harassment, and Inappropriate Romantic Relationships**
  The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community – students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. In addition, inappropriate Romantic relationships can undermine the University's mission when those in positions of authority abuse or appear to abuse their authority. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate Romantic relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from the University. (More information is available at http://policy.uconn.edu/?p=2884.)

- **Sexual Assault Reporting Policy**
  To protect the campus community, all non-confidential University employees (including faculty) are required to report assaults they witness or are told about to the Office of Diversity & Equity under the Sexual Assault Response Policy. The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help. (More information is available at http://sexualviolence.uconn.edu/.)

- **Students with Disabilities**
  The Center for Students with Disabilities(CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. The CSD is in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu. Detailed information regarding the accommodations process is also available on their website at www.csd.uconn.edu