

Math 1313: Finite Math Course Syllabus

Section number: 16279

Delivery format: Online lecture

Prerequisites: Credit for or placement out of math 1310. Students with prior credit of MATH 2331 or INDE 2331 will not receive credit for this course. May not apply to a major or minor in Mathematics.

Upon successful completion of this course, students will be able to solve systems of linear equations and inequalities in a variety of ways. They will apply these skills to mathematical descriptions of real-world scenarios and will be able to communicate their conclusions. They will be able to apply algebraic methods in solving problems in business and financial mathematics. They will understand and be able to use various counting techniques and will apply them to elementary problems in probability. They will learn elementary methods of descriptive and inferential statistics and will appreciate the role of statistics in thinking critically about other areas of knowledge.

A student in this class is expected to complete the following assignments:

- 1 Online Exam (prerequisite)
- 2 Midterm
- 3 Final Exam
- 4 Online Quizzes

Grading

Online Exam: 10%

Midterm: 30%

Final Exam: 40%

Online Quizzes: 20%

Total: 100%

GRADING SCALE:

If you call your average “x”:

| | | |
|-------------------------------|----------------------------|----------------------------|
| A $93 \leq x \leq 100$ | B- $80 \leq x < 83$ | D+ $67 \leq x < 70$ |
| A- $90 \leq x < 93$ | C+ $77 \leq x < 80$ | D $63 \leq x < 67$ |
| B+ $87 \leq x < 90$ | C $73 \leq x < 77$ | D- $50 \leq x < 63$ |
| B $83 \leq x < 87$ | C- $70 \leq x < 73$ | F $0 \leq x < 50$ |

The learning materials for Math 1313, including the textbook, are found online on the CourseWare site at www.casa.uh.edu. Students are required to purchase an *access code* at the University Book Store to access the learning materials.

LECTURE VIDEOS:

The videos of lectures covering the course material will be posted on the course website. Students are responsible for watching them in a timely manner. After watching the videos, work on the corresponding online quizzes. Do not wait until the due dates to start working on the quizzes as you may have several quizzes closing on the same date for ease of scheduling.

LIVE MEETINGS:

Your instructor will keep online meetings to answer your questions and to help on the material. The times for live meetings will be announced on the course calendar. Videos will be posted after live meetings. If you can't attend the live meeting; make sure you watch the video ASAP. The link to attend live meetings is provided on CASA titled "ONLINE CLASSROOM". Click and log in with your REAL NAME.

ONLINE QUIZZES:

Online quizzes will be given regularly; check the due dates from your CASA account. You may take each quiz up to 20 times during the time that it's available. Your highest score is retained as the score for that quiz. For ease of scheduling, many quizzes may be due on the same day. Do not wait until the due date to work on them.

There will be no makeup quizzes for any reason. Neither I, nor the Math Department, is responsible for any difficulty that you have in accessing The quizzes. Please don't delay taking quizzes – there are times during the week when CourseWare is slow or overloaded. There is no amnesty period for the quizzes; the quizzes will NOT be reopened at the end of the semester. If you miss a quiz, you will NOT have a chance to make up for it.

Please contact CourseWare tech support directly if you are having problems. The email link is on the CASA homepage.

EXAMS:

There will be a pre-requisite test, midterm and a mandatory final exam. The complete schedule is on CASA.

Test 1 covers the prerequisite material; it covers subjects you need to know before taking this course. If you don't do well on Test 1; that means may be you are not ready to take this course. It is an online test; you can find it under "online assignments" tab at CASA.

Midterm and Final will be on campus; time and location will be announced on CASA. Taking the final exam is mandatory; a student won't pass this class without taking the final exam.

No make ups on any tests –make sure you contact me ahead of time if there are any conflicts.

If you want to take the tests at a testing center near you, please contact UH Distance Education for arrangements and notify me.

<http://www.uh.edu/online/student-resources/proctoring-students.php>

Whenever possible, and in accordance with 504/ADA guidelines, the University of Houston will attempt to provide reasonable academic accommodations to students who request and require them. Please call 713-743-5400 for more assistance.

Math 1313 Finite Math – Topics List

Linear Equations

- Slope and Equations of Lines
- Graphs of Linear Equations
- Systems of Linear Equations
- Graphs of Linear Inequalities
- Linear Models

Solving Equations and Inequalities

- Solving Linear Programming Problems
- Applications of Linear Programming

Matrices

- Matrices
- Solving Systems of Linear Equations
- Matrix Operations
- Matrix Multiplication
- The Inverse of a Matrix

Math of Finance

- Simple Interest and Compound Interest: Future and Present Value
- Annuities: Future Value and Present Value
- Sinking Funds and Amortizations

Sets and Counting Techniques

- Sets and Venn Diagrams
- The Number of Elements in a Set
- The Multiplication Principle
- Permutations and Combinations

Probability

- Experiments, Events and Sample Spaces
- Introduction to Probability
- Rules of Probability
- Using Counting Techniques in Probability
- Conditional Probability

Bayes Theorem

Random Variables, Probability Distribution and Statistics

Random Variable

Expected Value and Odds

Variance and Standard Deviation

The Binomial Distribution

The Normal Distribution

Applications