

COURSE SYLLABUS

YEAR COURSE OFFERED: 2019 – 2020

SEMESTER COURSE OFFERED: Fall/Spring

DEPARTMENT: MATH

COURSE NUMBER: 1313 all face to face sections

NAME OF COURSE: Finite Math

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

All students may use their own non-graphing, non-programmable calculator. TI-30X IIS is the recommend calculator. The online calculator will still be available at the CASA testing facility only.

LEARNING OBJECTIVES

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.

COMMUNICATION/EMAIL

Communication from student to instructor, outside of class, will be addressed to the student via their UH email. Notices sent shall be presumed to have been received by the student. Thus, the student is responsible for the content in emails sent to his/her UH account, regardless if his/her external (non-UH) email provider filters or blocks them. Emails lost to external providers shall not be used as a justification to claim faculty are unresponsive/not communicating in any way.

Communication from student to instructor, outside of class, should be in the following format. Students should put their course number (Math 1313) and section number (sec #####) in the subject line. There should be a proper greeting and addressing of the instructor. Followed by a **brief** description of the request in the email. Only vital information to the request should be included. Finally ending with your name and Peoplesoft ID. Messages not following this format may be overlooked or identified as junk mail.

ACADEMIC HONESTY

University of Houston students are expected to adhere to the Academic Honesty Policy as described in the UH

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Undergraduate Catalog. "Academic dishonesty" means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at the University of Houston or by a course instructor to fulfill any and all academic requirements. Academic dishonesty includes, but is not limited to, the following: *Plagiarism; Cheating and Unauthorized Group Work; Fabrication, Falsification, and Misrepresentation; Stealing and Abuse of Academic Materials; Complicity in Academic Dishonesty; Academic Misconduct*. Refer to <https://www.uh.edu/provost/policies/honesty/documents-honesty/academic-honesty-policy.pdf> and the UH Student Catalog for the definition of these terms and university's policy on Academic Dishonesty.

Anyone caught cheating will be reported for further disciplinary actions, receive sanctions as explained on these documents, and will have an academic dishonesty record at the Provosts office. The sanctions for confirmed violations of this policy shall be commensurate with the nature of the offense and with the record of the student regarding any previous infractions. Sanctions may include, but are not limited to: a lowered grade, failure on the examination or assignment in question, failure in the course, probation, suspension, or expulsion from the University of Houston, or a combination of these. Students may not receive a W for courses in which they have been found in violation of the Academic Honesty Policy. If a W is received prior to a finding of policy violation, the student will become liable for the Academic Honesty penalty, including F grades.

Posting answers for Poppers or Homework questions online (at group chats or other online tools) is considered an academic honesty violation. Students are expected to know the difference between "getting/giving HELP on a problem" and "getting/giving answers to a problem". If a student is caught sharing answers (in person or online), he/she might be reported to the departmental hearing officer for an academic honesty violation. If a student becomes aware of cheating or any other violations; that student is responsible for informing the instructor.

MAJOR ASSIGNMENTS/EXAMINATIONS

Test 1(online) - 6%
Tests 2, 3, 4 - 16% each
Final exam - 19%
Homework – 10%
Online Quizzes - 12%
Poppers and Attendance - 5%

Note: The raw score(without any extra credit) of the final exam can be used to replace your lowest test score assuming it higher.

GRADING SCALE

A	$x > 93$	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-	$60 \leq x < 63$
B	$83 \leq x < 87$	C-	$70 \leq x < 73$	F	Below 60

INSTRUCTIONS FOR POPPERS

- For each lecture starting on the third week of classes you will be asked a series of problems that will have to

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do with the lecture.

- This requires a buying a poppers package from the bookstore. Make sure that the package is for your **specific section**. If you switch sections you will be required to buy a set for the new section.
- You are required to fill in your id number, popper number and blacken the correct circles. Make sure that your id number and popper number are correct before turning in the popper at the end of the lecture. If these are not filled out correctly or if the darken circles are too light you will not get credit for that day's lecture even if you attended.
- The total number of popper questions for the course will be counted, 85% of the total number of questions will be the 100%. For example, *if* there are 5 questions each class for 24 classes, which is 120 questions. Your grade will be calculated out of $120(.85) = 102$ points.

INSTRUCTIONS FOR QUIZZES

- The quizzes are located in the CASA CourseWare course website under the "Online Assignments" tab.
- **Course Policies Quiz** will be available at the beginning of the semester and will remain open throughout the semester. You must take this quiz and score 100 on it BEFORE you will be allowed to use CourseWare for your online assignments, including quizzes, practice tests, and any online tests.
- The quizzes will close on the due dates given on CourseWare at 11:59 pm and will not re-open.
- One of the quizzes will be dropped.
- You have 20 times to take each quiz.
- There is a 75 minute time limit for each quiz.
- The following table shows what sections each quiz covers.

Quiz	Sections Covered	Quiz	Sections Covered
Quiz 1	1.5, 2.1, 2.2	Quiz 9	6.1, 6.2
Quiz 2	3.1, 3.2	Quiz 10	6.3, 6.4
Quiz 3	3.3, 3.4, 3.5	Quiz 11	6.4
Quiz 4	4.1, 4.2, 4.3	Quiz 12	6.5
Quiz 5	Ch 4 Mix, 5.1	Quiz 13	6.5, 6.6
Quiz 6	5.2	Quiz 14	7.1, 7.2, 7.3, 7.4
Quiz 7	5.3, 5.4	Quiz 15	7.4, 7.5, 7.6
Quiz 8	5.4		

INSTRUCTIONS FOR HOMEWORK

- All homework will be submitted in the CASA CourseWare website
 - Electronic multiple choice problems assigned by your instructor and entered on CourseWare under the EMCF tab.

EXAM INFORMATION

Test 1: Covers pre-requisite materials and will be ONLINE on the CASA website **August 20 – 30**

Test 2: Covers chapters 1, 2 and 3 and will be in the CASA testing center **September 26 – 28**

Test 3: Covers chapter 4, 5 and 6.4 and will be in the CASA testing center **October 31 – November 2**

Test 4: Covers chapters 6.5, 6.6 and 7 and will be in the CASA testing center **November 22 – November 25**

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- The tests will be given in a CASA testing center, see “Proctored Exams” tab for further details.
- You can access the scheduler for these exams by logging into Courseware.
- The exams given in CASA can consist of both multiple choice and written questions.
- The multiple choice questions will be machine graded.
- The written questions (free response) will be graded by the CASA personnel.
- There will be a practice test on Courseware for each exam. A percentage of your practice test score will be added to your exam score as bonus.
- The scheduler will be available approximately 2 weeks prior to the start of the exam cycle. Exam dates are listed above.
- If a student misses an exam the final exam raw score will replace the missed exam. Else the final exam raw score (score earned without any bonus points) can replace the lowest exam score.

FINALEXAM

- A **comprehensive final exam** will be given in CASA.
- The final will include chapters 1 through 7.
- You can access the scheduler for this exam by logging into Courseware.
- Dates: **December 6 – 9**

REQUIRED READING

- Course webpage: <http://www.casa.uh.edu>
- The textbook, online quizzes, and additional help materials will be made available by logging into CourseWare at <http://www.casa.uh.edu>. The first portion of these materials are freely available for the first portion of the class. All students must purchase a Course Access Code and enter it on CourseWare by the end of the second week of class to continue accessing the course learning materials. A Course Access Code must be purchased from the University Bookstore.

EXEMPTION FROM FINAL EXAM

- If your letter grade calculated by the Letter Grade Calculator in your CASA account is a B- or better on the Opt out dates and you have completed the teacher evaluation, you will be able to opt out of the Final Exam. Otherwise you will be required to take the Final Exam, which also requires a CASA reservation. If you choose to exempt, you may not change your mind after the deadline has passed.
- Opt out dates: **TBD**.
- Instructions on how to opt out will be provided to you in class and via email from your instructor towards the end of the semester.

LATE ASSIGNMENT, MAKE-UP AND INCOMPLETE POLICIES

- This course is a cumulative course. You as a student need to keep up with the reading, homework assignments and exams.
 - Your final exam score (raw score) will replace your lowest exam score if the former is higher. (This replacement, if applicable, will occur at the end of the semester after the Letter Grade Calculator (LGC) is turned off. A missed test will result in a score of zero. If you miss two or more exams, only one of those scores will be replaced.)

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- The primary reason for this policy is to offset the impact of zero/low test scores due to emergencies (medical, personal, or otherwise) on a student's final course grade. Therefore, students should not expect to have the option for a make-up test when such an emergency arises. Generally, there will be no make-up tests or "re-tests". *Possible exceptions are **noted below**.
- ***Note:** Exceptions may be made per [The Student Academic Adjustments/Auxiliary Aids Policy](#) for students with approved CSD accommodations , as well as for students with an official excused absence as recognized by University of Houston in accordance with federal and state law.

- The following is calculated for the final grade:
 - Four of the lowest homework assignments and/ are dropped.
 - 15% of the total number of popper questions will be dropped.

- Incomplete policy: The temporary grade of I (incomplete) is a conditional and temporary grade assigned when students for non-academic reasons beyond their control have not completed a relatively small part of all requirements for a course. The student must:
 - be currently passing the course or have a reasonable chance of passing the course, in the judgment of the instructor;
 - contact the instructor immediately regarding the reasons that prevent the student from completing the course, final assignment and/or final examination;
 - initiate the request for an I grade within 90 days of the posting of the course grade;
 - make arrangements with the instructor to complete the course requirements, if assigned;
 - understand that the only way to have an I grade changed to a passing grade is to fulfill course requirements in accordance with the conditions specified by the instructor;
 - understand that the grade of I may be changed only to another letter grade. If the student does not complete the course requirements in the time allotted (a maximum of one year) the I grade will convert to an F grade and will be noted as a lapsed incomplete on the student's transcript. An I grade once lapsed to an F grade may not be changed to a grade of W; and
 - not re-enroll (re-register) for the courses in which their grade is currently recorded as an I. Even when the conditions for fulfilling the course requirements include participation in all or part of the same course in another semester, the student must not re enroll (re register) for the course.

TUTORING OPTIONS AVAILABLE:

- For help with any pre-requisite materials, you can log on to your CASA account , then choose MATH PLACEMENT from your course listing and then choose Help Videos
- CASA <http://www.uh.edu/casa/tutoring-center/>
- LAUNCH <http://www.uh.edu/ussc/launch/>

STUDENT DISABILITY ACCOMMODATIONS AND SERVICES

The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students who have a disability. In accordance with Section 504 and ADA guidelines, University of Houston strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please visit The [Center for Students with DisABILITIES \(CSD\)](#) website at <http://www.uh.edu/csd/> for more information.

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Accommodation Forms: Students seeking academic adjustments/auxiliary aids must, in a timely manner (usually at the beginning of the semester), provide their instructor with an approved current Student Accommodation Form (paper copy or [online version](#), as appropriate) before an approved accommodation can be implemented. Details of this policy, and the corresponding responsibilities of the student are outlined in [The Student Academic Adjustments/Auxiliary Aids Policy \(01.D.09\)](#) document under *[STEP 4: Student Submission (5.4.1 & 5.4.2), Page 6]*. For more information please visit the Center for Students with Disabilities [FAQs](#) page. Additionally, if a student is requesting a (CSD approved) testing accommodation, then the student will also complete a Request for Individualized Testing Accommodations (RITA) paper form to arrange for tests to be administered at the CSD office. CSD suggests that the student meet with their instructor during office hours and/or make an appointment to complete the RITA form to ensure confidentiality.

*Note: RITA forms must be completed at least 48 hours in advance of the original test date. Please consult your [counselor](#) ahead of time to ensure that your tests are scheduled in a timely manner. Please keep in mind that if you run over the agreed upon time limit for your exam, you will be penalized in proportion to the amount of extra time taken.

UH CAPS STATEMENT

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

LIST OF DISCUSSION/TOPICS

Chapter 1 Linear Equations

- 1.1 Slope and Equations of Lines
- 1.2 Graphs of Linear Equations
- 1.3 Systems of Linear Equations
- 1.4 Graphs of Linear Inequalities
- 1.5 Linear Models

Chapter 2 Solving Equations and Inequalities

- 2.1 Solving Linear Programming Problems
- 2.2 Applications of Linear Programming

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Chapter 3 Matrices

- 3.1 Matrices
- 3.2 Solving Systems of Linear Equations
- 3.3 Matrix Operations
- 3.4 Matrix Multiplication
- 3.5 The Inverse of a Matrix

Chapter 4 Math of Finance

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

Chapter 5 Sets and Counting Techniques

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

Chapter 6 Probability

- 6.1 Experiments, Events and Sample Spaces
- 6.2 Introduction to Probability
- 6.3 Rules of Probability
- 6.4 Using Counting Techniques in Probability
- 6.5 Conditional Probability
- 6.6 Bayes Theorem

Chapter 7 Random Variables, Probability Distribution and Statistics

- 7.1 Random Variable
- 7.2 Expected Value and Odds
- 7.3 Variance and Standard Deviation
- 7.4 The Binomial Distribution
- 7.5 The Normal Distribution
- 7.6 Applications