Math 3336 – 20636 (Spring 2020)
Discrete Mathematics and Its Applications *

Instructor:	Dr. Blerina Xhabli
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Course Homepage:	www.math.uh.edu/∼blerina
Lecture Time/Room:	10:00am – 11:30am TuTh / SEC 102
Office:	212 PGH
Office Hours:	TuTh 11:30am – 12:20pm/2:30pm – 3:20pm
Prerequisites:	Math 2331 or equivalent

Textbook

Discrete Mathematics and Its Applications, Eighth Edition, by Kenneth H. Rosen.

Course Description

This course covers elementary discrete mathematics for computer science: it is designed to prepare math, computer science, and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. It emphasizes mathematical definitions, logical inference, and proof techniques. Topics include propositional logic, first-order logic, proof methods; sets, functions, relations; mathematical induction, recursion; elementary number theory, graph theory; basic complexity theory, recurrences.

Grading

The final grade for this class will be determined as follows:

Homework:	20%
Exam I:	25%
Exam II:	25%
Final Exam:	30%

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*This course syllabus provides a general plan for the course; deviations may be necessary.

Homework

A list of homework problems will be given every week on the course homepage. Homework will be due on Tuesdays. **Late homework is not permitted for any reason.** Expect to spend approximately three hours working on homework outside of class for every hour spent in class. If you have any issues with the way the homework or a particular problem is graded, please contact me. Your turned-in homework grade will be based on the following guidelines:

- Homework will not be accepted by email.

- Write legibly and neatly. Provide space for the grader to make comments.

- Your homework should be scanned in a single pdf file, and be submitted online though your CASA accounts. The detailed instructions for homework submission are posted on your class web page.

- Homework should be written on standard-sized paper (8.5" $\times$ 11").

- Solutions to homework problems should be written in sequential order.

- You may discuss the problems with other classmates as you figure out how to do the problem or establish its truth, but the write-up should be done by you alone and in your own words.

- Homework is due every Tuesday, at 11:59pm. Once the deadline has passed, the homework is considered late and will not be accepted.

- Your lowest two homework grades throughout the term will be dropped when calculating your final grade.

Attendance/Class Participation

Class participation is very important for being successful in this course. It is strongly recommended to attend every class meeting and pay attention and be engaged in the lectures.

Questions on exams will be drawn from homework assignments and lecture notes presented in class. If you have to miss a class for school approved reasons (e.g., school sponsored events, major religious holidays) you need to let me know as soon as possible, and prior to the missed class, for it to not count against your grade.

To encourage the class participation and regular attendance, I will give ***in-class popper quizzes without any prior notice*** whenever time permits. These quizzes will be about the material learned during that lecture day or prior to that. The quizzes will be open books/open notes and will be solved individually. And the grades on these quizzes will act as bonus points to the upcoming exams.

Exam Dates

There will be two exams and one final. All will be held in our usual classroom.

Exam 1 (§1.1–§4.3)	Thursday, February 20, 10:00am – 11:30am
Exam 2 (§4.4–§8.5)	Thursday, April 9, 10:00am – 11:30am
Final Exam	Tuesday, May 5, 11:00am – 2:00pm

Books and notes will not be allowed on all exams. Please bring your Student ID to exams. You may be asked to show it to prove that you are the student whose name is on the exam you turn in.

Makeup Policy

There will be no make-up exams offered in this course. Your lowest midterm score will be replaced by your score on the final exam if it helps your grade. There are no exceptions in the case of two missed midterms. Students are expected to take the final exam on the dates listed above. A make-up final exam would be offered only in the case of a documented medical emergency. Make-ups will not be offered to accommodate personal travel plans.

Reading Assignments

Reading assignments will be given weekly on the course homepage. Completing the reading assignments is just as critical as doing the written homework. You should read the assigned sections *before* we cover them in classes, so you are prepared to answer questions or ask about material you do not understand.

Tutoring

The Math Department is offering tutoring for 3000-level and 4000-level courses in the Mathematics Undergraduate Student Lounge (MUSL), located in Fleming Basement, Room 11. The Math Department has set up a schedule for tutoring of different courses throughout the semester by qualified math majors tutors.

Withdrawal

- *Wednesday 01/29/2020*: the last day to drop/withdraw a course without receiving a grade.

- *Thursday 04/02/2020*: the last day to drop/withdraw a course with a 'W'.

Policy on Incompletes

Incompletes are given only in very unusual circumstances, and never just to prevent a bad grade or provide the student with more time to prepare for an exam.

Academic Honesty

Plagiarism and cheating are serious offences. University of Houston students are expected to adhere to the Academic Honesty Policy as described in the Student Handbook. In this course this shall mean the following: Exams shall be worked on independently and without the use of your textbook, homework, calculators, or class notes. Homework assignments may be discussed with others, but the write-up must be done on the student's own and in the student's own words, without the help of other people or outside sources. If you are aware of anyone who is cheating or receiving unfair outside assistance, you are honor bound to inform the professor of what is occurring, and you will be considered an accomplice if you do not. Anyone caught cheating will receive a failing grade in the course and be turned over to the department chair and dean for further disciplinary action.

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 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. For more information about this program, please visit http://www.uh.edu/caps/outreach/lets_talk.html

CSD Accommodations

Any student with a disability or chronic health problem for whom special accommodations would be helpful is encouraged to discuss with the instructor the types of assistance that might be offered. If you have forms from CSD that need to be filled out, you should come to my office to discuss the accommodations being made, and to fill out the required forms.

Schedule

The following is a tentative schedule which might be updated throughout the semester. Mostly we will cover three to four sections per week.

Table 1: Tentative Calendar for Math.3336 – Spring 2020

	Tuesday	**Thursday**
Week 1 1/13-1/17	Introduction §1.1	§1.2 §1.3
Week 2 1/20-1/24	§1.4 §1.5	§1.5 §1.6
Week 3 1/27-1/31	§1.7 §1.8	§1.8 §2.1
Week 4 2/3-2/7	§2. 2 §2.3	§2.3 §2.5*
Week 5 2/10-2/14	§4.1 §4.3	§4.3 §4.4
Week 6 2/17-2/21	Review I	Exam I (§1.1 – §4.3)
Week 7 2/24-2/28	§4.4	§4.6 §5.1
Week 8 3/2-3/6	§5.1 §5.2	§5.2 §5.3*
Week 9 3/9-3/13	SPRING	BREAK
Week 10 3/16-3/20	§6.1 §6.2	§6.3 §6.4
Week 11 3/23-3/27	§6.4 §6.5	§6.5 §8.5
Week 12 3/30-4/3	§8.1 §8.2	§8.2
Week 13 4/6-4/10	Review II	Exam II (§4.4 – §8.5)
Week 14 4/13-4/17	Chapter 9	Chapter 9
Week 15 4/20-4/24	Chapter 10	Chapter 10
Week 15 4/27-5/1	Final Review	Final Review
Final Exam	**Tuesday,**	**May 5, 11:00 − 2:00pm.**