

## Course Syllabus

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### Course Information

Course Number/Section	CS 3305-001
Course Title	Discrete Mathematics for Computing II
Term	Fall 2020
Days & Times	TuTh 11:30 am – 12:45 pm
Room	SCI 1.220

### Professor Contact Information

Professor	Jason Jue
Email Address	jjue@utdallas.edu
Office Location	ECSS 4.408
Office Phone	(972) 883-4429
Online Office Hours	(Blackboard Collaborate) TuTh 1:00 pm – 2:00 pm or by appointment

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### Course Modality and Expectations

<b>Instructional Mode</b>	The course will be presented in Traditional face-to-face mode. See: <a href="https://www.utdallas.edu/fall-2020/fall-2020-registration-information/">https://www.utdallas.edu/fall-2020/fall-2020-registration-information/</a>
<b>Course Platform</b>	Lectures will be delivered in-person, with recordings posted on eLearning. The eLearning and Blackboard Collaborate platforms will also be utilized for online office hours, homework assignments, and exams. Exams will be administered through the Honorlock platform ( <a href="https://honorlock.com/">https://honorlock.com/</a> ), which will require the use of a webcam.
<b>Expectations</b>	Students are expected to either attend lectures in person, or to view the recorded lectures in a timely manner. Homework is to be uploaded to eLearning by specified due dates. Exams are to be taken at specified dates and times. Class participation is strongly encouraged for all instructional modes.
<b>Asynchronous Learning Guidelines</b>	For asynchronous access, recorded classroom lectures will be made available on the course eLearning website. For further details on asynchronous access, see: <a href="https://www.utdallas.edu/fall-2020/asynchronous-access-for-fall-2020/">https://www.utdallas.edu/fall-2020/asynchronous-access-for-fall-2020/</a>

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### Course Pre-requisites, Co-requisites, and/or Other Restrictions

CS/CE/TE 2305 with a grade of C or better, and Math 2414 or Math 2419

### Course Description

Advanced counting methods; recurrence relations, divide and conquer algorithms, principle of inclusion and exclusion. Partial orders and lattices, Algorithmic complexity. Graph theory. Strings and languages. Number theory. Elements of modern algebra.

### Student Learning Objectives/Outcomes

- Ability to recognize and construct proofs
- Ability to recognize and use equivalence relations and partial orderings
- Ability to use recursive definitions and solve recurrence relations
- Ability to understand advanced counting methods
- Ability to understand graph theory and basic graph algorithms
- Ability to use tree terminology and basic tree algorithms

## **Required Textbooks and Materials**

Discrete Mathematics and Its Applications, Eighth Edition, Kenneth H. Rosen, McGraw-Hill, 2019

## **Assignments & Academic Calendar**

Exam 1:	Tuesday, September 22, 2020
Exam 2:	Tuesday, October 27, 2020
Exam 3:	Tuesday, November 24, 2020

## **Grading Policy**

Homework:	15%
Quizzes:	10%
Exam 1:	25%
Exam 2:	25%
Exam 3:	25%

## **Course & Instructor Policies**

Homework is to be submitted online through eLearning by the due date. No credit will be given for homework submitted past the due date.

Exams must be taken at the scheduled dates and times. Makeup exams will not be given except for documented emergencies or other extreme circumstances. During exams, all forms of communication with anyone other than the instructor or exam proctor is strictly prohibited. Failure to comply will be considered a violation of the Student Code of Conduct and will be subject to disciplinary action.

All homework and exams are to be individual efforts. You may discuss homework problems with other students; however, all submitted work should be your own work. Exams are not to be discussed with other students during the exam period. Copying of homework or exam solutions or from other students, from solution manuals, or from any other sources is not allowed and will be considered a violation of the Student Code of Conduct. No credit will be given for copied homework or exams, and suspected cases of copying may be referred to the Office of Community Standards and Conduct.

Regular attendance and class participation are strongly encouraged. Students are participating in Traditional mode are expected to attend lectures and are encouraged to participate by asking questions and engaging in in-class discussion. Students participating in asynchronous mode are expected to view lecture recordings on a timely basis and are encouraged to make use of online office hours and discussion boards.

Attendance and participation will be recorded for monitoring and statistical purposes; however, the attendance and participation record will not be considered when determining final grades. In-person participation records may be used to assist the University or local public health authorities in performing COVID-19 occurrence monitoring.

## **Computer Science Mentor Center (CSMC)**

The Computer Science Mentor Center provides virtual drop-in and appointment-based tutoring and other services for CS 3305 students. Students are encouraged to make use of the CSMC frequently throughout the semester. Hours of operation and appointment requests are available through the CSMC website: <https://csmc.utdallas.edu/>.

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## COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record. Please see <http://go.utdallas.edu/syllabus-policies>.

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## Classroom Conduct Requirements Related to COVID-19

UT Dallas requires that all students must wear a face covering that covers the nose and mouth in all university buildings and classrooms. To help protect the health and safety of students, instructors, and the University community, students who choose not to wear a face covering may not attend class in person but may attend a course remotely. Anyone attending class in person without a face covering will be asked to put one on or leave. Instructors may end the class if anyone present refuses to appropriately wear a face covering for the duration of class. Students should also be sure they are at least six feet away from their fellow students and faculty, and seated in a seat that is designated to ensure that distance. Students who either refuse to wear face coverings appropriately or to adhere to other social distancing protocols may face disciplinary action for [Student Code of Conduct](#) violations. Students who are unable to comply with the university policies including wearing a face covering should consult the [Comets United](#) webpage for further instructions.

Students who have tested positive for COVID-19 or may have been exposed should not attend class in person and should instead follow required disclosure notifications as posted on the university's website (see ["What should I do if I become sick?"](#) webpage)

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## Class Recordings

The instructor may record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

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## Class Materials

The Instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

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## Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

*"As a Comet, I pledge honesty, integrity, and service in all that I do."*

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### **Academic Support Resources**

The information contained in the following link lists the University's academic support resources for all students.

Please go to [Academic Support Resources](#) webpage for these policies.

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### **UT Dallas Syllabus Policies and Procedures**

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

*These descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.*