Course Syllabus

Course Information

Course Prefix, Number, Section: CS/CE 2305.004

Course Title: Discrete Mathematics for Computing I

Term: Fall 2020

Professor Contact Information

Instructor: Serdar Erbatur
Email: (sxe190003@utdallas.edu)
Office:ECSN 3.608
Office Hours: Monday – Wednesday 1pm – 2pm (or by appointment) (in office or via MS Teams)

Course Modality and Expectations

Instructional Mode	Traditional
Course Platform	The class will be held face to face. We will meet in the classroom.
Expectations	1) I expect every student (with or with asynchronous access) to be on time when submitting homeworks and exams, and maintain the academic integrity. 2) I want all my students to contact me or TA, whey they need help with class material. 3) I expect students to maintain email communication with me in an appropriate way. I do not expect to see emails starting with an informal word like “Hey..”. Please avoid informalities like this and send your emails with a proper greeting. You can address me with my first or last name.
Asynchronous Learning Guidelines	I will record the class sessions and upload the recordings to Microsoft Streams platform provided by the university. Students with asynchronous access will need to watch these recordings on time. (Please see the beginning of next page.)

All students (with or without asynchronous access) have the same responsibilities for exams and homeworks. Everyone will need to submit their work on time.

CS attendance policy will not be applied.

Asynchronous access is not same as online modality. Please review the defitinion of asynchronous access, given by the University.

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.

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)

Class Attendance

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected regardless of modality. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes. These attendance requirements will not be used as part of grading (see Class Participation below for grading information).

In-person participation records may be used to assist the University or local public health authorities in performing COVID-19 occurrence monitoring. Please note – in-person attendance requires consistently adhering to University requirements, including wearing a face covering and other public safety requirements related to COVID-19, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Participation

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Recordings

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. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

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.

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.

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

ALEKS score required, or MATH 2312 with a grade C or better

Course Description

Discrete Mathematics for Computing I (3 semester hours): Principles of Counting. Boolean operations. Logic and proof methods. Recurrence relations. Sets, relations, functions. Elementary graph theory. Elementary number theory.

Student Learning Objectives/Outcomes

After successful completion of this course, the student should be able to:

- Understand definition and scope of Discrete Mathematics.
- Understand existing proofs and construct proofs for new solutions.
- Apply basic counting techniques.
- Understand basic definitions and properties of set, relations, functions and apply them.
- Understand what an algorithm is, apply algorithms to solve problems.
- Understand algorithmic complexity and use asymptotic notations for the same.
- Understand and apply basic definitions and properties of logic.

Required Textbooks and Materials

Discrete Mathematics and Its Applications, 8th Edition, by Rosen, Kenneth H., McGraw Hill, 2019.

Suggested Course Materials

Additional course material will be posted on eLearning.

Assignments & Academic Calendar

(Topics, Reading Assignments, Due Dates, Exam Dates)

Exams will be posted on eLearning. Students will be given 24 hours to submit their solutions.

Exam 1: September 28

Exam 2: October 28

Exam 3: TBD

There will be 10 assignments each of which will be posted on eLearning on Wednesday evenings of weeks 2, 3, 4, 6, 8, 9, 10, 12, 13 and 14. Each homework will be due at 11:59PM on the following Wednesday. Homeworks are not assigned during the exam weeks.

Grading Policy

(including percentages for assignments, grade scale, etc.)

Homeworks: %10

Exam 1: %30

Exam 2: %30

Exam 3: %30

Final letter grades will be calculated using the following scheme provided by the University. Grade ranges below will remain mostly same, except that I might change borders with half percent. For instance, the lower bound of %70 for C- could be changed to %69.5.

97 - 100: A+
94 – less than 97: A
90 – less than 94: A-
87 – less than 90: B+
84 – less than 87: B
80 – less than 84: B-
77 – less than 80: C+
74 – less than 77: C
70 – less than 74: C-
67 – less than 70: D+
64 – less than 67: D
60 – less than 64: D-
0 – less than 60: F

Course & Instructor Policies

Further details for exams will be specified on eLearning. Late submissions for exams will not be accepted.

If a student is unable to take the exams on their scheduled dates, they should inform the instructor in advance. Makeup examinations will be scheduled only if the student has a valid medical excuse proven by a letter.

Each homework should be submitted individually via eLearning with an acceptable format (pdf, doc as well as other formats).

Each homework should be submitted by their due date in order to be considered for full credit. Exceptions can be made only for valid medical reasons proven by signed letters.

Late homework submissions will only be accepted with penalties; %10 for the first late day, %20 for the second late day and %25 for the rest. Please note that a submission with %25 penalty will only be graded over 75, thus you will receive at most 75 points in that case, which falls into C grade range. This policy is not subject to negotiation and applied to everyone without exception if no official medical letter is provided.

Late submissions are not permitted once graded homework has been returned to students, or the solutions to the homework has been provided (whichever is earlier).

Students do not need to ask instructor for permission to submit a late homework since the late submission policy is clear now.

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."

Academic Support Resources

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

Please see http://go.utdallas.edu/academic-support-resources.

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.

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