

## Course Syllabus

### Course Information: Spring

021

## CS 2305 – Discrete Mathematics for Computing

**Instructor:**

Simeon Ntafos

ECSS 4.403

972-883-2809

ntafos@utdallas.edu

Office Hours: TBD

**Grader:**

---

**Course Description (Catalog):**

---

[CS 2305 \(MATH 2305\)](#) Discrete Mathematics for Computing I (3 semester credit hours)

Principles of counting. Boolean operations. Logic and proof methods.

Recurrence relations. Sets, relations, functions. Elementary graph theory.

Elementary number theory. Prerequisite: Score of at least 75% in ALEKS or

[MATH 2312](#) with a grade of C or better. (Same as [CE 2305](#), [TE 2305](#)) (3-0) S

---

**Course Objectives**

Upon completion of this course, students will have:

- (a) Ability to use and apply basic logic
- (b) Ability to use and apply basic definitions and properties of sets, functions, relations.
- (c) Ability to understand what an algorithm is, algorithmic complexity;
- (d) Ability to understand and construct proofs including proofs by induction;
- (e) Ability to use basic counting techniques
- (f) Ability to understand and use basic number theory
- (g) Ability to understand and use basic graph theory.

**Required Textbooks and Materials**

“Discrete Mathematics and its Applications”, Kenneth H. Rosen, McGraw Hill (8<sup>th</sup> edition with Connect)

## **Assignments & Academic Calendar (tentative)**

### **Material to be covered:**

Chapters 1, 2.1-2.3, 3.1-3.2, 4.1-4.2, 5.1-5.2, 6.1-6.3, 7.1, 9.1-9.3, 10.1-10.5, 11.1-11.3

### **Important Dates:**

Last Day to Drop without W: February 3, 2021

Last Day to Drop (W): March 2, 2021

Last Day to Drop Late (WL): April 5, 2021

Last Day of Class: Thursday, May 6

### **University Closings:**

Martin Luther King Day

January 18, 2021

Spring Break

March 15-21, 2021

### **Grading Policy (tentative)**

Homework 40%; 2 exams (30% each). Policy will be discussed/finalized during first week of class.

Grading Scale: (applied to total scaled to 100)

0-59 F

60-62 D- 63-66 D 67-69 D+

70-72 C- 73-76 C 77-79 C+

80-82 B- 83-86 B 87-89 B+

90-92 A- 93-96 A 97-100 A+

Please visit <http://go.utdallas.edu/syllabus-policies> for other policies