

# Math 326-01 (17110) Discrete Mathematics

CR5124, TR 14:30-15:45

Sungjin Kim

**E-mail:** [sungjin.kim@csun.edu](mailto:sungjin.kim@csun.edu)

**Office:** LO1301B

**Office Hours:**

T: 12:45pm-14:25pm (100 min),

T: 15:55pm-16:55pm (60 min),

R: 15:55pm-17:00pm (65 min) Place: LO1301B

**Course Description:** Propositional calculus, predicate calculus, set algebra, relations, functions, mappings, fields and number systems.

**Textbook:** Kenneth H. Rosen, Discrete Mathematics and Its Applications, Eighth Edition,

ISBN: 978-1-259-67651-2

**Method of Instruction:** Lectures, in-class quizzes, in-class exams

**Prerequisites:** [ECE 320](#) or [PHIL 230](#); Completion of [MATH 150B](#) with a grade of "C" or better.

**Course Topics and Dates:** (Tentative)

1. Logic and Proofs: Chapter 1 (Week 1)
2. Basic Structures: Sets, Functions, Sequences, Sums, Cardinality, Matrices: Sections 2.1-2.5 (Week 2)
3. Algorithms: Chapter 3 (Week 3)
4. Modular Arithmetic: Sections 4.1-4.3 (Week 4)
5. Induction and Recursion: Chapter 5 (Week 5)
6. Counting, Probability, Bayes' Theorem: Chapter 6-7 (Week 6-7)
7. Divide-and-Conquer Algorithms and Recurrence Relations: Section 8.3 (Week 8)
8. Relations: Chapter 9 (Weeks 9-10)
9. Graphs: Chapter 10 (Week 11-12)
10. Trees: Chapter 11 (Week 13-14)
11. Boolean Algebra: Chapter 12 (Week 15)
12. Modeling Computation: Chapter 13 (Week 16)

**Grading Plan:** (Category/Weight)

1. Exams: 2 in-class exams (10/16 R, 11/20 R), 45%
2. Quizzes: 6 in-class quizzes (1 lowest dropped), 15%
3. Homework: 6 homework assignments, 15%
4. Final Exam: 12/18 R 3pm-5pm CR5124, 25%

**Calculator Policy:** One scientific calculator may be used for homework, quizzes, and exams. Excel may be used for homework, but not for quizzes and exams.

**Grades:** 92% and above A, 90%-92% A-, 87%-90% B+, 82%-87% B, 80%-82% B-, 77%-80% C+, 72%-77% C, 70%-72% C-, 67%-70% D+, 62%-67% D, 60%-62% D-, less than 60% F.

**Online Resources:** Important announcements and class materials will be uploaded on CANVAS. Each student is required to access CSUN account and check CANVAS frequently.

**Academic Integrity:** Students may discuss homework problems with fellow students or the instructor. However, all written assignments including homework, quizzes, and exams need to be completed by each individual student only. Any form of unauthorized help is not allowed in exams and quizzes. Any assistance of electronic device such as tablet PC, or cell phone is not allowed during exams and quizzes. The exams and quizzes will be closed-book. Thus, the textbook and the lecture notes must be kept inside your book bag during the exams and quizzes. For more information, see

<http://catalog.csun.edu/policies/academic-dishonesty/>

**Grade Forgiveness Policy:** The University recognizes that undergraduate students may need to repeat one or more courses in order to fulfill degree requirements and/or enhance previously acquired skills. However, students should seek academic advisement before deciding to repeat any course. Students should be aware that other institutions (e.g., medical schools, graduate programs, law schools) might not recognize this repeat policy and will use the forgiven grades in recalculating GPAs. For more information, see

<https://catalog.csun.edu/policies/repeating-courses-grade-forgiveness-undergraduate/>

**Special Assistance:** If you have a disability and need accommodations, please register with the Disability Resources and Educational Services (DRES) office or the National Center on Deafness (NCOD). The DRES office is located in Bayramian Hall 110 and can be reached at (818) 677-2684. NCOD is located on Bertrand Street in Jeanne Chisholm Hall and can be reached at (818) 677-2611.

**Title IX:** Students and faculty each have responsibility for maintaining a safe and respectful space to express their reasoned opinions. Professional courtesy and consideration for our classroom community are especially important with respect to topics dealing with differences in race, color, gender and gender identity/expression, sexual orientation, national origin, religion, disability, and age. For more information, see

[https://www.csun.edu/sites/default/files/Syllabus%20T9\\_062016.pdf](https://www.csun.edu/sites/default/files/Syllabus%20T9_062016.pdf)

- **CSUN with A HEART**. If you are facing challenges related to food insecurity, housing precarity/homelessness, mental health, access to technology, eldercare/childcare, or healthcare, you can find guidance, help, and resources from CSUN with A HEART (<https://www.csun.edu/heart>). This site includes links to several communities of support like the Central American United Student Association (CAUSA), the Pride Center, the Black House, the Veterans Resource Center (VRC), etc.

- **Tutoring**. If you need some help with the class materials, there is free on-campus and online tutoring offered by the Mathematics Tutoring Center (<https://www.csun.edu/science-mathematics/mathematics/tutoring>) and the Learning Resource Center (<https://www.csun.edu/undergraduate-studies/learning-resource-center>). Information specific to this class is included in our Canvas site.