

Discrete Structures and Algorithms I

Syllabus – MAT2440 E640 – Fall 2024

Daniel Packer

1 Course Information

- **Instructor:** Daniel Packer
- **Email:** daniel.the.packer@gmail.com
- **Office Hours:** TBD
- **Class Meeting:** Monday/Wednesday — 6:00–7:40p.m. — N923
- **Credits:** 3
- **Prerequisites:** MAT 1375 or higher and one of the following:
 - CST 1201
 - CST 2403
 - MAT 1630

2 Course Description

This course introduces the foundations of discrete mathematics as they apply to computer science, focusing on providing a solid theoretical foundation for further work. Topics include functions, relations, sets, simple proof techniques, Boolean algebra, propositional logic, elementary number theory, writing, analyzing and testing algorithms.

3 Required Materials

- **Textbook:** Discrete Mathematics and Its Applications, by Kenneth H. Rosen, 8th Edition, ISBN: 9781259676512

4 Grading

Component	Percentage
Homework	15%
Midterm Exams (3)	20%
Project	15%
Final Exam	40%
Class Participation	10%

5 Policies

5.1 Attendance

Attendance is taken every day. Unexcused absence from the class will lower your overall grades.

5.2 Late Work

Late homework will be accepted until the end of the semester.

5.3 Missing Exams

Accommodations will only be made for exams missed due to valid absences. These should be coordinated with the appropriate office. For example,

- For illnesses: contact jcurrie@citytech.cuny.edu in L-237 from the Student Accessibility Office.
- For deaths in the family: go to the Office of Student Affairs, N325.

In such cases, the weighting of the final exam will be increased to replace the weight of the missed exam.

5.4 New York City College of Technology Policy on Academic Integrity

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalog.

5.5 Writing Intensive Course Designation

This course has been designated as a “Writing Intensive” (WI) course by City Tech. A WI course includes critical reading, logical thinking, and the use of writing to help students understand the topic; the use of appropriate style and disciplinary conventions in writing and speaking; the use of research resources, including the library, specific to the discipline; a detailed syllabus; a comprehensive course calendar; and a minimum of fifteen pages of writing per student. Writing assignments will be both formal (graded) and informal (non-graded). Written work will be a mandatory part of the course. This can include coding projects, proofs, and written assignments. Written work will account for a minimum of 10% of the overall grade in the course

This syllabus is subject to change. Students will be notified of any changes in class and through the course website.