

# CSC/MAT-220: Discrete Structures

## Final Summary

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### Abstract

This summary is intended to help guide you in a review process that is both edifying and promotes success on the final. We outline a list of topics along with corresponding books sections and assignments. This review is by no means comprehensive and you should consider it your responsibility to map out how all the topics in this course are interconnected. As one last piece of advice, be sure that you know definitions and major theorems.

#### i. Recurrence Relations.

- Section 23
- EFYs 8–9
- Homework 5
- Lab 5 and 7 (cost analysis)

#### ii. Functions

- Sections 24–25
- EFYs 10 and 12
- Homework 5
- Every Lab (functional expressions)

#### iii. Cardinality and Infinity

- Sections 10 (cardinality of finite sets) and 25 (cardinality of infinite sets)
- EFY 12 and story of Cantor from Week 11
- Homework 5
- Infinite Sentinel from Week 11.

#### iv. Permutations

- Sections 27–28
- Dihedral Group from Week 12
- Homework 6

#### v. Probability

- Sections