CS 225 : Discrete Structures in CS (Summer 2020)

Abbreviated Weekly Schedule:

To summarize, Assignments and discussions are due Sundays and quizzes on materials covered in the prior weeks are due Wednesdays. Please make sure that you have submitted the assignments and quizzes via Canvas.

* This schedule is subject to change. Changes, if necessary, will be updated here and posted via Canvas/Piazza announcements.

Week	Course Topics (followed the 5th edition of the required textbook)
#1 **Assignments due:** June 28, 2020 **Syllabus Quiz due:** July 01, 2020	• Chapter 2: Section – 2.1 Logical Form and Logical Equivalence • Chapter 2: Section – 2.2 Conditional Statements • Chapter 3: Section – (3.1 to 3.2) Predicates and Quantified Statements
#2 **Assignments due:** July 05, 2020 **Canvas Discussion due:** July 05, 2020 **Quiz 1 due:** July 08, 2020	• Chapter 4: Section – (4.1 to 4.5) Direct Proof and Counterexample • Chapter 4: Section – 4.7 Indirect Argument: Contraposition • Chapter 4: Section – (4.7 to 4.8) Indirect Argument: Contradiction and Two Classical Theorems
#3 **Assignments due:** July 12, 2020 **Quiz 2 due:** July 15, 2020	• Chapter 6: Section – 6.1 Set Theory: Definitions and Element Method of Proof • Chapter 6: Section – (6.2 to 6.3) Properties of Sets and Disproofs, Algebraic Proofs • Chapter 5 : Section – (5.1 and 5.2) Sequences and Summations
#4 **Assignments due:** July 19, 2020 **Canvas Discussion due:** July 19, 2020 **Quiz 3 due:** July 22, 2020	• Chapter 5: Section – (5.2 to 5.3) Mathematical Induction: Weak Induction • Chapter 5: Section – 5.4 Strong Mathematical Induction

#5 Assignments due: July 26, 2020 Quiz 4 due: July 29, 2020	• Chapter 5: (Section – 5.6, 5.7, and 5.9) Recursive Definitions • Chapter 9: Section – (9.2 to 9.3) Basic Counting Rules: Multiplication and Addition Rule • Chapter 9: Section – 9.4 The Pigeonhole Principle
#6 Assignments due: August 02, 2020 Canvas Discussion due: August 02, 2020 Quiz 5 due: August 05, 2020	• Chapter 9: Section – (9.2 and 9.5) Permutations and • Combinations Chapter 9: Section – 9.6 Combinations with Repetition Allowed
#7 Assignments due: August 09, 2020 (no late submission allowed) Quiz 6 due: August 09, 2020	• Chapter 1: Section – 1.4 The Language of Graphs • Chapter 4: Section – 4.9 Application: The Handshake Theorem • Chapter 10: Section – 10.1 Connectedness: Trails, Paths and Circuits • Chapter 10: Section – 10.6 a Shortest Path Algorithm
# Final Week Canvas Discussion due: August 15, 2020	**Final Quiz :08/10/2020 – 08/15/2020 (Week 1– Week 7)**