



Discrete Structures (CS202)

Weekly Course Plan

Week	Lecture	Section	Homework
1	Introduction The Logic of Compound Statements (Logical Form and Logical Equivalence)	Chapter 1: Mathematical Review	
2	The Logic of Compound Statements (Conditional Statements, Valid and Invalid Arguments)	Exercise Set 2.1: 6, 8, 12, 16, 18, 19, 25, 26, 32, 38, 50, 51	Exercise Set 2.1: 17, 20, 30, 39, 52
3	The Logic of Quantified Statements (Predicates)	Exercise Sets 2.2 8, 10, 12, 13, 20, 21, 23, 29, 33, 40, 47 and 2.3: 3, 6, 10, 12, 25, 29, 41	Exercise Sets 2.2: 5, 7, 8, 31, 50 and 2.3: 13, 26, 42, 43
4	The Logic of Quantified Statements (Arguments)	Exercise Sets 3.1 3, 9, 10, 11, 14, 22, 23, 24 and 3.2: 16, 17, 18, 21, 25	Exercise Sets 3.1 5, 25, 26 and 3.2: 19, 20, 22, 23
5	Elementary Number Theory and Methods of Proof	Exercise Set 3.3: 9, 14, 16, 22, 31, 32, 35, 36, 41	Exercise Set 3.3: 22, 23, 25, 26
6	Elementary Number Theory and Methods of Proof (cont.)	Exercise Sets 4.1: 1, 2, 11, 12, 24, 28, 29, 46, 49 And 4.2: 4, 7, 15, 16, 24, 25 And 4.3: 3, 4, 5, 6, 12	Exercise Sets 4.1: 25, 30, 31 And 4.2: 17, 18, 26, 28 And 4.3: 9, 10, 13
7	7 th Week Exam	Exercise Sets 4.4: 7, 8, 9, 21, 24, 25, 27 4.5: 1, 2, 18, 19, 20, 4.6: 10, 19	Exercise Sets 4.4: 1, 2, 3, 4, 22, 29 4.5: 3, 4, 21, 22, 24, 4.6: 11, 20
8	Counting	Solve 7 th Week Exams	
9	Counting (cont.)	Exercise Sets 9.1: 14, 26, 27, 28 9.2: 14, 33, 39 9.3: 4, 8, 23	Exercise Sets 9.1: 29, 30 9.2: 15, 32 9.3: 12, 24
10	Functions	Exercise Sets 9.5: 6, 7, 16 and 9.6: 3, 13	Exercise Sets 9.5: 9, 17 and 9.6: 4, 14

11	Functions (cont.)	Exercise Set 7.1: 1, 27, 8, 15, 16, 27	Exercise Set 7.1: 2, 28, 8, 17
12	12 th Week Exam	Exercise Sets 7.2: 7, 10, 11, 13, 36, 37 and 7.3: 1, 6, 9, 16, 17,	Exercise Sets 7.2 8, 16, 17, 18, 21 and 7.3: 7, 10, 18
13	Relations	Solve 12 th Week Exams	
14	Sequences and Mathematical Induction	Exercise Sets 8.1: 2, 5, 8, 13, 21 8.2: 1, 9, 12 8.3: 11, 16	Exercise Sets 8.1: 14, 20 8.2: 18, 37 8.3: 12, 17
15	Revision	Exercise Set 5.2: 3, 6, 8, 10, 13	Exercise Set 5.2: 4, 11, 12
16	Final Exam	----	

Text Book

Michael Sipser, *Introduction to the Theory of Computation*, 2nd edition, Thomson Course Technology.

Assessments Procedure

Assignments	10% (Sheets)
7th Week Exam	30% (10% on Section+20% on Exam)
12th Week Exam	20% (5% on Section+15% on Exam)
Final Exam	40%