

SYLLABUS – MATHEMATICS 8 – Discrete Mathematics

Text: *Discrete Math and Its Applications*, Rosen, 4th Edition, 1999, McGraw Hill Publishers

Supplementary Materials for the Student:

Student Solutions Guide – Odd problem solutions

Supplementary Materials for the Instructor:

Instructor's Resource Guide – Even problem solutions and sample tests

Chapter 1: Foundations: Logic, Sets and Functions

1.1 & 1.3	1.4 & 1.5	1.6 & 1.7	1.8
1	1	1	1

TOTAL HOURS: 4

Chapter 2 & 3: Algorithms, Mathematical Reasoning

2.1 & 2.2	2.3 & 2.4	3.1 & 3.2
1	1	1

TOTAL HOURS: 3

Chapter 4: Counting – Permutations, Combinations, Pigeonhole Principle

4.1	4.2	4.3	4.4	4.6	4.7
1	1	2	1	2	1

TOTAL HOURS: 8

Chapter 5: Recurrence, Inclusion-Exclusion Principle

5.1	5.2	5.3	5.4	5.5	5.6
1	1	1	2	2	2

TOTAL HOURS: 9

Chapter 7: Graphs

7.1 & 7.2	7.3	7.4	7.5	7.6	7.7	7.8
1	1	1	2	1	1	1

TOTAL HOURS: 8

Chapter 8 & 9: Trees, Bolle Algebra

8.1	8.2	9.1	9.2	9.3	9.4
1	1	1	1	1	2

TOTAL HOURS: 7

Chapter 10: Languages and Automata

10.1	10.3	10.4
2	2	2

TOTAL HOURS: 6

TOTAL HOURS: 45**Suggested Exam Schedule:****Exam #1: Chapter 1-3****Exam #2: Chapter 4****Exam #3: Chapter 5****Exam #4: Chapter 7****Exam #5: Chapter 8.1, 8.2 and 9****Final Exam: Comprehensive including Chapter 10****Effective Fall Semester 2001****Maurice Ngo**

MN/hps

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