Hong Kong Institute of Vocational Education

Discipline of Computing and Mathematics

Teaching Plan 2001/2002

Module Title	Discrete Mathematics & Statistics	Module Code	CMM1313
Subject Lecturer	Chang Woon On (CP/TM)	Discipline	CM
Course (stream)	Diploma in CSA and SE	Course Code	41110

Schedule of Teaching and Assessments

Week	Teaching	Tutorial	Assessment
1	Topic 1: Sets, sets of numbers & Venn diagrams	Sheet 1	
2	Topic 1: Set operations & set identities	Sheet 2	
3	Topic 1: Mathematical induction	Sheet 3	
4	Topic 1: Modular arithmetic	Sheet 4	
5	Topic 2: Propositional logic	Sheet 5	
6	Topic 2: Truth tables	Sheet 6	
7	Topic 2: Predicates & quantifiers	Sheet 7	
8	Topic 2: Proof techniques	Sheet 8	
9	Topic 3: Matrix arithmetic	Sheet 9	
10	Topic 3: Defining relations	Sheet 10	Assignment 1 (hand-in)
11	Topic 3: Representing relations	Sheet 11	
12	Topic 3: Properties of binary relations	Sheet 12	
13	**Revision / Test**		Test 1
14	Topic 4: Introduction & definition of graphs	Sheet 13	
15	Topic 4: Matrix representation & applications	Sheet 14	
16	Topic 4: Paths, circuits & shortest path algorithm	Sheet 15	
17	Topic 4: Eulerian & Hamiltonian graphs	Sheet 16	
18	Topic 4: Trees and minimum spanning trees	Sheet 17	
19	Topic 5: Descriptive statistics	Sheet 18	
20	Topic 6: sum/product rules, inclu-exclu principle	Sheet 19	
21	Topic 6: Permutations & Combinations	Sheet 20	Assignment 2 (hand-in)
22	Topic 6: Events & probability	Sheet 21	
23	Topic 6: Conditional probability	Sheet 22	
24	Topic 7: Random variables	Sheet 23	
25	Topic 7: Mathematical expectation	Sheet 24	
26	Topic 7: Binomial distribution	Sheet 25	Test 2
27	Topic 7: Poisson distribution	Sheet 26	
28	Topic 7: Normal distribution	Sheet 27	
29	Topic 7: Normal distribution	Sheet 28	
30	**Revision**		

Assignment 1	5%	Topic 1 & 2	week 11 (26 to 30 November, 2001)
Test 1	10%	Topic 1 & 2	Week 14, 22 December, 2001 (Saturday)
Assignment 2	5%	Topic 3 & 4	week 22 (25 February to 1 March, 2002)
Test 2	10%	Topic 3, 4, 6.1& 6.2	Week 27, 13 April, 2002 (Saturday)