

# Combinatorics

Book: Miklos Bona – A Walk through Combinatorics, 3<sup>rd</sup> edition

19/1	(B) 1.1-1.2 2.1-2.2	Pigeonhole principles and mathematical induction	Chap. 1: 2, 4, 9, 13 Chap. 2: 3, 5, 8, 11
22/1	(B) 3.1-3.3	Permutations, choices and the binomial theorem	Chap. 2: 14, 28 Chap. 3: 1, 3, 7, 15, 21
23/1	-	Discussion	-
24/1	(B) 4.3, 5.1, 5.3	Combinatorial identities, compositions and partitions	Chap. 4: 3, 5, 9, 18 Chap. 5: 1, 7, 11
26/1		Holiday	-
29/1	(B) 5.2, 6.1	Set partitions	Chap. 5: 2, 4(a), 5, 16
30/1	-	Quiz 2	-
31/1	(B) 7.1-7.2	Permutations by cycles	Chap. 6: 2, 5, 8, 14, 17, 18, 22
2/2	(B) 8.1	Inclusion-Exclusion formulas and Ordinary generating functions	Chap. 7: 1, 9, 13 Chap. 8: 1, 2, 8, 9
5/2	(B) 8.2	Exponential generating functions	Chap. 8: 3, 16, 19, 20