

# MATH 132-04 DISCRETE MATHEMATICS

**Semester:** Spring 2009

**Instructor:** Alex Degtyarev

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**Office:** Room SA130

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**Office Hours:** Tuesday 10:40–11:30

Thursday 9:40–10:30

**Exams & Grading:** • **1<sup>st</sup> Midterm** (25% )

March 12, 2010,

• **2<sup>st</sup> Midterm** (25% )

April 30, 2010,

• **Final Exam** (40% )

To be announced

• **Quizzes** (10 %)

**Course Schedule:** Wednesday 9:40-10:30

Room G236

Friday 10:40-12:30

Room G236

**Text Book:** Ralph P. Grimaldi,

*Discrete and Combinatorial Mathematics* (Fifth Edition),

Addison-Wesley, 2005.

	Week	Subject	MT
#1	Feb 1–5	Counting, Permutations (1.1, 1.2)	
#2	Feb 8–12	Combinations and combinations with repetition (1.3, 1.4)	
#3	Feb 15–19	Logic, Sets, and Mathematical induction (2.1, 2.2, 3.1, 3.2, 4.1, 4.2)	
#4	Feb 22–26	Integers, Euclidean algorithm, the fundamental theorem of arithmetics. (4.3, 4.4, 4.5)	
#5	Mar 1–5	The inclusion and exclusion principle, Stirling numbers (8.1, 5.2, 5.3)	
#6	Mar 8–12	Review, Midterm I	#1
#7	Mar 15–19	Partial orders, equivalence relations (7.1, 7.3, 7.4)	
#8	Mar 22–26	The pigeonhole principle (5.5)	
#9	Mar 29–Apr 2	Graphs, Trees (11.1, 11.2, 12.1, 13.2)	
	Apr 5–9	¡¡SPRING BREAK!!	
#10	Apr 12–16	Euler graphs, Planar graphs, Graph coloring (11.3, 11.4, 11.5, 11.6)	
#11	Apr 19–23	Recurrence relations (10.1, 10.2)	
#12	Apr 26–30	Review, Midterm II	#2
#13	May 3–7	Generating functions (9.1, 9.2, 10.4)	
#14	May 10-14	Partition of integers (9.3)	