



INTERNATIONAL SCHOOL OF ENGINEERING

Faculty of Engineering, Chulalongkorn University

2143110 Discrete Mathematics

(Second semester 2008)

Course Syllabus

Course Number	2143110
Credits	3
Course Name	Discrete Mathematics
Department	International School of Engineering
Semester	2 nd
Year	2008
Instructors	Atichat Preittigun (atichat@rocketmail.com) Jaruloj Chongstitvatana, PhD (jaruloj@gmail.com) Nattee Niparnan, PhD (nattee.n@chula.ac.th)
Pre-requisite	-
Level	Undergraduate
Hours/week (Lecture)	3
Schedule	Section 1: Wed 14:30 – 16:00 and Fri 11:00 – 12:30 Section 2: Wed 09:00 – 10:30 and Fri 11:00 – 12:30
Classrooms	Section1: Wed: Bldg 2, Rm.303/1; Fri: Bldg 2, Rm.304/1 Section2: Wed: Bldg 2, Rm.304/1; Fri: Bldg 2, Rm.303/2

Topics

Sets, relations, functions, theorem and proof; combinatorics; counting, principles of inclusion and exclusion, recurrent relations, generating functions; graphs and trees; introduction to number theory.

Calendar

Week	Section 1	Section 2
1	Foundation 1	Foundation 1
2	Foundation 2	Foundation 2
3	Foundation 3 + Quiz	Foundation 3 + Quiz
4	Graph and Tree 1	Number Theory 1
5	Graph and Tree 2	Number Theory 2
6	Graph and Tree 3	Number Theory 3
7	Graph and Tree 4 + Quiz	Number Theory 4 + Quiz
8	--- break for midterm ---	
9	Counting 1	Graph and Tree 1
10	Counting 2	Graph and Tree 2
11	Counting 3	Graph and Tree 3
12	Counting 4 + Quiz	Graph and Tree 4 + Quiz
13	Number Theory 1	Counting 1
14	Number Theory 2	Counting 2
15	Number Theory 3	Counting 3
16	Number Theory 4 + Quiz	Counting 4 + Quiz

Grading

There will be 4 quizzes and one final exam but no midterm exam. Each quiz will be done in the class in 90 minutes time frame. The quiz dates given here are tentative.

- Quiz1 15% (on Jan 30)
- Quiz2 15% (on Feb 27)
- Quiz3 15% (on Mar 27)
- Quiz4 15% (on Apr 24)
- Final examination 40%

Policy on Academic Honesty

- Although collaboration on assignments in the form of discussion with classmates is encouraged, copying codes or solutions either entirely or partially from other students is strongly prohibited. All of the staffs teaching this course take this matter seriously.
- Cheating in any grading-related issues will not be tolerated. Violators will be punished according to the university's regulations.



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Website

<http://www.nattee.net/2143110/2551-2>

Required Reading

- Rosen, "*Discrete Mathematics and Its Applications*", 6th edition, McGraw-Hill.