



Course Syllabus

Course Number	2143110
Credits	3
Course Name	Discrete Mathematics
Department	International School of Engineering
Semester	2 nd
Year	2010
Instructors	Nattee Niparnan, PhD (nattee.n@chula.ac.th) Athasit Surarerks, PhD (athasit@cp.eng.chula.ac.th)
Pre-requisite	-
Level	Undergraduate
Hours/week (Lecture)	3
Schedule	Tue, Wed 16:00-17:30
Classrooms	Bldg 2, Rm.302

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
1 (3 – 7 Jan)	Foundation 1 (Set, logic, function)
2 (10 – 14 Jan)	Foundation 2 (Set, logic, function)
3 (17 – 21 Jan)	Foundation 3 (proof)
4 (24 – 28 Jan)	Foundation 4 (proof)
5 (31 Jan – 4 Feb)	Graph and Tree 1
6 (7 – 11 Feb)	Graph and Tree 2
7 (14 – 18 Feb)	Graph and Tree 3
-- No midterm exam --	
8 (28 Feb – 4 Mar)	Graph and Tree 4
9 (7 – 11 Mar)	Counting 1
10 (14 – 18 Mar)	Counting 2
11 (21 – 25 Mar)	Counting 3
12 (28 Mar – 1 Apr)	Counting 4
13 (4 – 8 Apr)	Number Theory 1
14 (11 – 15 Apr)	Number Theory 2
15 (18 – 22 Apr)	Number Theory 3

Grading

- Quiz 30% (there will be 3 topic quizzes)
- In-class assignment 15% (tasks are given during the class)
- Off-class assignment 15% (tasks are given on the website)
- Final exam 40%

The final exam will be arranged during the official examination weeks. There will be no mid-term exam.

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.

Website

<http://www.nattee.net/2143110/2553-b>

Required Reading

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