

NETWORK SCIENCE COURSE INFORMATION

Instructor: Assoc. Prof. Dr. Orhan Dagdeviren (<http://www.ube.ege.edu.tr/~dagdeviren/>)

Course Web Page: <http://www.ube.ege.edu.tr/~dagdeviren/html/teaching.html>

Time: Friday, 9:30-12:00

Assistant: Res. Ass. Can Umut Ileri (canumutileri@gmail.com)

Aim and Content: This year we will cover approximation algorithms for selected graph theoretical problems.

Course Metaterials: We will study mainly on [Prof. My T. Thai's](#) (from University of Florida) Approximation Algorithms course notes.

List of Topics:

1. Introduction
2. Greedy Strategies
3. k-Center, multiway cut, k-Cut problems
4. Bin Packing
5. Linear Programming
6. Duality
7. Rounding
8. Semidefinite Programming

Tentative Grading:

Coding Homeworks: 30 % (The grades of the late homeworks will be decreased 3 points for each day.)

Written Homeworks: 30 % (Grading penalty is same with the coding homeworks)

Project: 40 %

If a student requests, grade of the project will be replaced with the grade of the complementary exam.

Attendance.