Project Topics and Grading Policy for "Graphs and Network flows"

2 main projects along with 4 homework assignments.

Homework 1(10%)
Due: April 18, 2017
Review of some generative models for networks, degree-distributions and an introduction to using igraph package in R

Homework 2(10%)
Due: April 25, 2017
Random walk on random networks, the notion of PageRank

Homework 3(10%)
Due: May 2, 2017
Introduction to community finding algorithm

Project 1(30%)
Due: May 16, 2017
Analyzing friendship networks of individuals to identify strong social ties

Homework 4 (10%)
Due: May23, 2017
Graph theory applications

Project 2 (30%)
Due: June 9
Designing a movie recommendation system by learning from user preference through community finding