Purdue University. **CS 580 Algorithm design and analysis** Aug 20, 2013

Syllabus

Lecturer: Elena Grigorescu

1 Basic info

Place and time: Felix Haas, G066 Tu/Th 10:30 - 11:45 am
Instructor: Elena Grigorescu, elena-g@purdue.edu; Office hours: Tue 3-4 pm.
TA: Leo Osvald, losvald@purdue.edu. Office hours: TBD

2 Description

A tentative list of topics includes scheduling problems, minimum spanning tree problems, data compression, FFT, network flow, linear programming, NP and computational intractability, approximation algorithms, randomized algorithms, sublinear algorithms.

3 Prerequisites

Undergraduate algorithms. Mathematical maturity.

4 Assignments

There will be one Pset due every other week, in hard copy, at the beginning of class. We might grade a subset (unknown to you in advance) of the assigned problems. Write your solutions as succinctly as possible while including all the necessary details.

Please typeset your solutions in LaTeX or write them legibly. You will find pointers on LaTeX on the class website.

Please ask your questions on piazza.com (piazza.com/purdue/fall2013/cs580) and answer your colleagues' questions to receive bonus points.

Each assignment will have an optional problem. The optional problem does not count towards your score, unless your grade will be a borderline case.

If you don't know the answer to a question you will receive 15% of the grade for the problem if you admit it up-front by writing "I don't know how to solve this problem" and nothing else. If your solution is wrong you get a score of 0 for that problem. This option does not apply to the optional problem.

5 Late homework

Homework extensions will only be granted in exceptional circumstances and only if requested 48 hours before they are due.

6 Collaboration policy

You may collaborate on your homework with your colleagues, however you must write down the solutions yourself. Please specify who you talked to. No other sources are allowed and violations will be penalized according to Purdue's integrity policies.

7 Grading

35% for homework, 25% for the midterm, 35% for the final, 5% for class participation (good answers on piazza will be rewarded.)