Course Website

Course materials will be posted on the course website:

`http://www.cs.princeton.edu/~smattw/Teaching/cos521fa21.htm`

Course Staff

Instructors	Office	Email
Mark Braverman	*Computer Science 304*	mbraverm@princeton.edu
Matt Weinberg	*Computer Science 317*	smweinberg@princeton.edu
Teaching Assistants		
Linda Cai		tcai@cs.princeton.edu
Zhou Lu		zhoul@cs.princeton.edu

Lectures

Class	Time	Place
Lecture	T/Th 1:30 - 2:50pm	Thomas Lab 003

Office Hours

Time	Place	Staff
Monday 11:00am - 1:00pm	Friend 010	Linda
Tuesday 3:00 - 4:00pm	CS 317	Matt
Wednesday 7:00pm - 9:00pm	Zoom (see Ed for link)	Zhou
Thursday 12:30 - 1:30pm	CS 303	Mark

Additional Reference materials

- "Algorithmic Game Theory" by Nisan, Roughgarden, Tardos, and Vazirani;
- "Randomized Algorithms" by Motwani and Raghavan;
- "Online Computation and Online Analysis" by Borodin and El-Yaniv;
- "Probabilistic Method" by Alon and Spencer;
- "Approximation Algorithms" by Vijay Vazirani;
- "Design of Approximation Algorithms" by Williamson and Shmoys;
- "Spectral Graph Theory" by Chung;

Grading

There will be 4 PSets throughout the semester. In the last ≈month of the course, everyone must either complete a take-home final or do a term project (in groups of 2). Grades will be 60% PSets and 40% final (exam or project). See `https://www.cs.princeton.edu/~singla/Fall20cos521/ProjectGuidelines.pdf` for tentative project guidelines.

Peer Grading

We will use codePost for submission and grading of assignments. You will grade each others' assignments **Your grade on PSets will be determined by peer evaluation.**

- **Purpose:** Evaluating your peers' assignments has pedagogical value, especially to the *grader* (you will write better solutions if you have experience evaluating them), but also to the gradee.
- **Purpose:** PSets for this class are long/challenging and the class is large. This will give the (peer and TA) graders an opportunity to provide thorough feedback for some instead of rushed feedback for everyone. We will encourage graders to focus on providing thorough text feedback.
- **How your grade will be determined:** Every submission will be graded by someone. Some (randomly selected) assignments will be graded by a TA. You will have the opportunity to appeal grades, in case there is a major mistake.
- The final will be graded exclusively by TAs.

Homework Logistics

- Homeworks will be due on Mondays at 11:59pm, and assigned well before the due date.
- Handwritten solutions will not be accepted. You may use the provided LaTeX templates to type your solutions, or any other template/online LaTeX editor. Assignments must be submitted to Mechanical TA.
- Some assignments will feature extra credit. Extra credit will not add to the assignment score. Generally, you should do extra credits because you enjoy the material, not because it will help your grade (although high success on the extra credits may improve your final grade). Your extra credits should be written very clearly in order to receive "full marks." Extra credit submissions which are clear but incomplete will generally get partial marks. Extra credit submissions which are unclear or difficult to evaluate may not receive any partial marks.
- Regrade requests: if your assignment is graded (by peers or a TA) erroneously, and it has a significant impact on your grade, you may submit a regrade request which clearly identifies the error. Any requests must be made within ten days of the assignment being graded, or will not be considered. Please note, however, that grading for an advanced graduate class is not fine-grained or used to distinguish between high-performing students. Due to this, regrade requests for minor discrepancies may not be considered, even if justified.
- You should make best efforts to anonymize your submission (e.g. do not put your name in the document body or title). But there are no repercussions if you forget.
- There will be four homeworks.

Late Policy

For PSets, you may use up to 4 late days throughout the semester, and these are intended to cover events such as unexpected illness, an out-of-town events, etc. (although you are free to use them for any reason you like without justification). You may use only up to 2 late days on a single assignment, and only an integer number of late days. In order to accommodate sporadic events (such as conference deadlines or presentations) which may cause you to miss a significant portion of a homework, we will "forgive" up to 50% of one homework (e.g. if you miss a homework entirely, you will get 50% on that homework instead. If you can only do 20% of a homework during one cycle, you will get 70% instead). Outside of this policy, we will generally not accept late submissions.[a]

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[a]If you have a true emergency that falls outside the guidelines of this policy, you should email us. But we will generally aim to stick to this policy.