

CS5350 – Outline of lectures and activities.

- **Week 1.** Introduction and loop invariant
- **Week 2.** Analysis of algorithms and design strategy (divide-and-conquer)
- **Week 3.** Growth of functions: mostly exercises / **submit projects to students**
- **Week 4.** Recurrences and analysis / **choose projects**
- **Week 5.** Exercises / Review / **intro to probabilistic and randomized analysis**
- **Week 6.** **Midterm 1** / **Article to read and summarize** [**]
- **Week 7.** Dynamic programming
- **Week 8.** **Dynamic programming and Greedy algorithms**
- **Week 9.** **Exercises on Dynamic programming and greedy algorithms / Amortized analysis as a homework**
- **Week 10.** Flow problems
- **Week 11.** **Long quiz** / review and summary of what was covered so far [*]
- **Week 12.** **Presentations of articles**
- **Week 13.** **Final exam** / **Work on projects** [**]
- **Week 14.** **Work on projects: meetings with me one-on-one**
- **Week 15.** **Presentations of projects**
- **Week 16.** **Presentation of projects**

Note: all highlighted descriptions are the changes that have occurred so far on our semester outline.