

Reading Assignments

CS 430 Introduction to Algorithms
Fall Semester, 2010

All reading assignments are from the text, *Introduction to Algorithms*, 3rd edition, by Thomas Cormen, Charles Leiserson, Ronald Rivest, and Clifford Stein, MIT Press, 2009.

You should have done the reading *before* the day in which that subject is covered. These reading assignments are very important for understanding the lectures and homework; plan to read, reread, and re-reread everything!

Lecture notes will be made available after each lecture; they are fragmentary, however, and cannot substitute for attending the lectures.

1. August 25—Review: Chapters 1–4, notes
2. August 30—Sorting: Chapters 6–9
3. September 15—Binary search trees: Chapters 12–13, omitting section 12.4
4. September 22—Exam 1
5. September 27—Augmenting data structures: Chapter 14
6. September 29—Dynamic programming: Chapter 15
7. October 6—Greedy algorithms: Chapter 16, omitting sections 16.4 and 16.5
8. October 13—Amortized analysis: Chapter 17
9. October 20—Heaps: Chapter 19
10. October 27—Disjoint sets: Chapter 21; section 21.4 optional
11. November 3—Exam 2
12. November 8—Graphs: Chapters 22–25, omitting section 25.3
13. November 17—NP-completeness: Chapter 34
14. December 1—Approximation Algorithms: Chapter 35, sections 35.1 and 35.2 only
15. December 6—Exam 3

The dates will be adjusted if the class goes more quickly or more slowly than anticipated.