

Exam 2 Review

TOPICS: What you need to know

1. Lecture slide sets 07, 09, 10, 11
2. All text reading assignments from these slide sets
3. All thinking assignments in these slide sets
4. Making and informed hypothesis about algorithm correctness and proving it using four proof techniques
5. Five notations of complexity order
6. Approximate analyses of algorithm efficiency – estimating Big-Oh complexity
 1. Nonrecursive algorithms
 2. Recursive algorithms
7. Detailed analyses of algorithm efficiency:
 1. Nonrecursive algorithms
 1. Calculating $T(n)$
 2. Determining complexity order
 2. Recursive algorithms
 1. Developing recurrence relations
 2. Interpreting recurrence relations
 3. Solving recurrence relations using various methods
 4. Calculating $T(n)$
 5. Determining complexity order

Exam Structure

- Take-home exam handled electronically via Canvas
- 5 Problems 30 multiple choice questions 60 points
- Exam is open text and notes
- All electronic devices are allowed
- It is prepared like a 50 minutes in-class exam
- **The class on Tuesday October 20 will be reserved for taking the exam at home. No lecture on October 20.**
- **IT IS HIGHLY RECOMMENDED THAT YOU COMPLETE THE EXAM WITHIN 50 MINUTES.**

Added Flexibility - time and a half

- Time and a half on Exam II for everyone.
- Available at 9:30 AM Tuesday October 20
- Due before 10:45 AM Tuesday October 20
- For students needing **accommodation**, this will allow sufficient time for taking the Exam and its take-home nature automatically addresses your needs.
- Submission deadline will be strictly enforced.
- **Late submission will not be accepted.**

Academic Honesty

**IF I SEE YOU ENGAGE IN ANY KIND
OF CHEATING OR SEE EVIDENCE
IN YOUR ANSWERS, YOU WILL FAIL
THE COURSE AND THE CASE WILL
BE REPORTED**