

CSCI 1321 (Principles of Algorithm Design II), Fall 2005

Review for Midterm Exam

1 Format of the exam

The exam will be in class October 18. You will have 75 minutes. You may use your textbook and any notes or papers you care to bring (with the exception of any materials from this course in previous years), but you may not use other books, each other's papers, or a calculator or computer, *except* that you may use a browser to look at material on the course Web site or at Sun's documentation of the Java library.

Questions will mostly be similar in format to the ones in quizzes, but probably longer and/or more difficult. There might also be a few multiple-choice or short-answer questions.

2 Topics to review

You are responsible for all material covered in class or in the assigned reading, up to but not including linked lists. (See the schedule for a list of assigned reading.) You should review in particular the following topics.

- Basic Java syntax and semantics, including classes, `import`, the difference between primitive types and objects, and generics.
- Inheritance and interfaces.
- Polymorphism.
- String processing — the Java `String` class and how to use it.
- Arrays in Java; sorting and searching of arrays.
- Stacks and queues — as ADTs, implementation using `Vectors`.