# CSCI 1321 (Principles of Algorithm Design II), Spring 2010
# Review for Midterm Exam

## 1 Format of the exam

The exam will be in class March 9. You will have 75 minutes. You may use 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 books (other than the course textbook), 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 and minute essays — some short-answer or multiple choice, some "what does this program do/print", some "write a program to do this task" — but probably somewhat longer and/or more difficult.

## 2 Topics to review

You are responsible for all material covered in class or in the assigned reading. (See the lecture topics and assignments page[1] 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, generics, and exceptions.

- 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 arrays.

You may find it helpful to write some short throwaway Java programs in addition to the code you are writing for the homework assignments. See the list of practice problems[2] for some suggestions.

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[1]http://www.cs.trinity.edu/~bmassing/Classes/CS1321_2010spring/HTML/schedule.html
[2]http://www.cs.trinity.edu/~bmassing/Classes/CS1321_2010spring/Notes/practice-problems/