CSCI 1323 (Discrete Structures), Spring 2001

Review for Final Exam

Note: The HTML version of this document may contain hyperlinks. In this version, hyperlinks are represented by showing both the link text, formatted like this, and the full URL as a footnote.

1 Format of the exam

The exam will be at the scheduled exam period, May 5 at 8:30am. It will be approximately twice the length of the preceding exams and so should take about 2.5 hours, but you make take the full three-hour exam period. You may use your textbook, any notes or papers you care to bring, and a calculator (though you should not need one); you may not use other books, a computer, or each other's papers.

The questions will be similar in form to those in the homework assignments and the first two exams.

2 Topics to review

You are responsible for all material covered in class or in the assigned reading. At least half of the questions will probably come from material covered since Exam 2, but there will be questions on earlier material as well. (See Homeworks and other assignments[1] for a list of assigned reading.) You should review in particular the following topics, and also those topics mentioned in the review sheets for Exams 1 and 2. This list is *not necessarily exhaustive*, but should give you an idea of what topics I consider most significant.

- Relations.
  - Definition and properties (reflexivity, symmetry, transitivity, antisymmetry).
  - Partial orderings.
  - Equivalence relations.
  - Topological sorting.
- Functions.
  - Definition and properties (one-to-one, onto).
  - Composition and inverse functions.
  - Set equivalence.
  - Order of magnitude of functions.
- Graphs.
  - Definition and terminology (pp. 335–336).

[1] `http://www.cs.trinity.edu/~bmassing/CS1323_2001spring/assignments.html`

  - Computer representation.

- Trees.
  - Definition and terminology (pp. 363–364).
  - Tree traversals.
  - Recursive definition and inductive proofs.
  - Computer representation.