

# Syllabus

## Professor

John R. Hubbard  
Office: 201 Jepson Hall.  
Hours: Wed 1:30-5:00, Fri 1:30-3:00; other times by appointment.  
Email: jhubbard@richmond.edu  
Phone: 289-8086 (office), 938-8666 (mobile), 379-0510 (home).

## Required Textbook

*Mathematical Structures for Computer Science*, Fifth Ed., by Judith L. Gersting, Freeman, 2003, 0-7167-4358-2

## Schedule

16 Introduction	18 Logical Statements (Sec. 1.1)	20 Propositional Logic (1.2)
23 Quantifiers (1.3)	25 Predicate Logic (1.4)	27 Correctness (1.6)
30 Proofs (2.1)	1 Induction (2.2)	3 Induction (2.2)
6 Correctness (2.3)	8 Recurrence Relations (2.4)	10 Analysis of Algorithms (2.5)
13 Sets (3.1)	15 Review	17 <b>Prelim. Test 1 on Ch. 1-2</b>
20 Counting (3.2)	22 Pigeonhole Principle (3.3)	24 Permutations (3.4)
27 Combinations (3.4)	1 Probability (3.5)	3 Relations (4.1)
6	8	10
13 Relational Databases (4.3)	15 Functions (4.4)	17 Big Oh, etc. (4.4)
20 Graphs (5.1)	22 Review	24 <b>Prelim. Test 2 on Ch. 3-4</b>
27 Trees (5.2)	29 Decision Trees (5.3)	31 Binary Trees (5.3)
3 Digraphs (6.1)	5 Warshall's Algorithm (6.1)	7 Euler Paths (6.2)
10 Dijkstra's Algorithm (6.3)	12 Traversal Algorithms (6.4)	14 Traversal Algorithms (6.4)
17 Boolean Algebra (7.1)	19 Review	21 <b>Prelim. Test 3 on Ch. 5-6</b>
24 Logic Networks (7.2)	26 Review	28 Review
<b>Final Examination: Sat May 6 at 7:00 p.m.</b>		

## Homework

The homework assignments are attached. Papers are due at the beginning of each class. Please:

- Use ordinary 8.5"×11" paper (not torn from a notebook).
- Use pencil (and eraser).
- Leave plenty of white space for comments.
- Staple your pages together.

## Tests

The three preliminary tests and final exam will be given only at the times specified in the schedule above.

## Grades

Grades will be posted online at our Blackboard course website. Final grades will be computed from:

Homework	10 %
Preliminary tests	60 %
Final examination	30 %

## Attendance Policy

Don't miss class. If you do, consult with your professor about how to recover from your absence.

## Academic Integrity

The Richmond Honor Council has the following written policy:

*All academic work, written or otherwise, submitted by a student to fulfill a course requirement is expected to be the result of the student's own thought, research, or self-expression. A student will have committed plagiarism if the student has reproduced someone else's work without acknowledging its source. Plagiarism is no more and no less a violation of the Honor Code than lying, cheating, or academic theft.*

This professor regards this Honor Code as essential to the academic integrity of the university.