

Prof: Dr. Peter M. Maurer

Office: Rogers 220.08

Phone: 710-7305

Email: Peter_Maurer@Baylor.edu

Web: <http://cs.ecs.baylor.edu/~maurer>

Text: James A. Anderson

Discrete Mathematics with

Combinatorics, Second Edition

Office Hours: 9-10, 11-12 MWF, 8-12:00 TR

1. Aug 22	Introduction	
2. Aug 24	Truth Tables, Logic, and Proofs	Chapter 1
3. Aug 26		
4. Aug 29		
5. Aug 31	Sets, Boolean Algebra, and Relations	Chapter 2
6. Sep 2		
7. Sep 5		
8. Sep 7		
9. Sep 9	Logic and Proofs	Chapter 3
10. Sep 12		
11. Sep 14		
12. Sep 16		
13. Sep 19	Exam Review	
14. Sep 21	Exam #1	
15. Sep 23		
16. Sep 26	Functions and Matrices	Chapter 4
17. Sep 28		
18. Sep 30		
19. Oct 3		
20. Oct 5		
21. Oct 7	Algorithms, Recursion, and Number Systems	Chapter 5
22. Oct 10		
23. Oct 12		
24. Oct 14		
25. Oct 17		
26. Oct 19	Graphs, Directed Graphs, and Trees	Chapter 6
27. Oct 21	Fall Break	
28. Oct 24		
29. Oct 26	Review for Exam #2	
30. Oct 28	Exam #2	
31. Oct 31		
32. Nov 2		
33. Nov 4	Counting and Probability	Chapter 8
34. Nov 7		
35. Nov 9		
36. Nov 11		
37. Nov 14	Graphs and Trees Revisited	Chapters 14 & 15
38. Nov 16		
39. Nov 18		
40. Nov 21		
41. Nov 23	Thanksgiving	
42. Nov 25	Thanksgiving	
43. Nov 28	Miscellaneous Topics	
44. Nov 30		
45. Dec 2		
46. Dec 5	Review for Final	
Final Exam:	Thursday Dec 8, 2:00-4:00 PM (Rogers 210)	

Course Objectives

By the time you have finished with this course, you should be familiar many of the basic mathematical structures used in computer science. You should know how to prove a simple theorem, and be able to solve a number of different mathematical problems. More specifically:

1. You will be able to use truth tables and Boolean algebra to examine propositions, and equivalent statements.
2. You will understand basic set theory and how it applies to the mathematics of computing.
3. You be able to demonstrate basic concepts of proofs.
4. You will understand the binary, octal, decimal, and hexadecimal number systems as they apply to computing.
6. You know how graphs, directed graphs, and trees are used in computing.
7. You will understand the basic principles of counting and probability.

Grading

Final Exam: 35%

Homework: 15%

Other Exams: 50% -- Equally divided among all exams.

Other Information

Exam grades will be curved, if necessary – but it probably won't be necessary.

University attendance policy will be enforced.

You are expected to attend every class. If you are unable to attend a particular class, you are still responsible for the material covered in the class. You must make arrangements to obtain this material from another student. Lectures will not be repeated.

Do not leave early!

Do not come late!

I have an open door policy with respect to students. I'm in my office most of the time. I am willing to meet with you any time I am in my office. Feel free to come to me with any matter that is troubling you, even if it has nothing to do with the class.