

# Syllabus

## Discrete Structures for Computer Science

### CS 172, Section 1, CRN 19549

### Fall 2008

**Instructor:** Associate Professor Eric Gottlieb  
**Contact data:** 317 Ohlendorf  
Office hours: 2-3:30 MW, 2-3 TF. Unannounced visits are welcome, time permitting.  
[gottlieb@rhodes.edu](mailto:gottlieb@rhodes.edu)  
843-3723 (email is better)

**The subject:** Many of the data structures, concepts, and techniques that you will learn about in later courses depend heavily on the mathematical ideas and structures that we will study in this class. We will examine topics including logic, sets, relations, functions, algorithms, number theory, induction, and basic counting techniques, and Boolean algebra.

**The text:** We will cover most of Chapters 1 through 7 of *Discrete Mathematics and its Applications*, 6<sup>th</sup> edition, by Rosen. If time permits, we may also cover material from later chapters or from other sources. See the attached schedule for tentative dates on which each section will be covered.

**Exams:** There will be three midterm exams and a final as indicated below. The dates are fixed, but material to be covered is tentative and depends on our pace.

Exam	Date	Material to be covered
MT 1	Monday 15 September	Chapter 1 and Sections 2.1 – 2.3
MT 2	Friday 17 October	Sections 3.1 – 3.7 and 4.1 – 4.4
MT 3	Friday 21 November	Sections 5.1 – 5.4 and 7.1 – 7.4
Final	Saturday 13 December at 8:30 AM	Comprehensive, with extra emphasis on material not covered on earlier exams

If you know you will miss an exam, you must notify me in advance so we can arrange an alternate time. You must provide a compelling and documented reason for missing the exam.

**Homework:** I will assign and collect homework roughly once per week. To earn full credit, your work must be correct, complete, neat, grammatically correct, and

properly ordered. If submitted fails to meet these conditions, I may deduct points, request a rewrite, or decline to accept it. The lowest homework grade will be dropped. Late homework will not be accepted. If you are unable to turn your homework in on time for a valid, documented reason, I may omit that assignment from the computation of your homework average.

**Attendance** is not a formal part of your grade, but I hope that there will be a two-way dialogue in class. I want you to share what you know (or, perhaps more importantly, what you don't) and learn from what others have to say. Poor attendance often foretells poor performance. For these reasons, I will take roll each day. If you miss more than five classes without a valid reason, I reserve the right to ask the Dean to drop you from the class.

**Your Final Grade** is determined as follows:

Midterm Exams: 19% each  
Homework Average: 19%  
Final Exam: 24%

The letter equivalent of your number grade will be assigned according to the following scale. These represent minimum grades in order to allow me some discretion. It is possible, for example, to receive a B while earning a total score of less than 83%. However, if you earn a score between 83% and 86%, you are guaranteed to receive a grade of B or better.

93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	<59
A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

**The Honor Code:** Violations of the honor code will be prosecuted. I reserve the right to assign a grade of 0 on any assignment for which the Honor Council finds that a violation has occurred. Please help me to keep the focus on learning and to avoid the unpleasantness associated with honor code violations.