

MATH 135: Discrete Mathematics
Spring 2008, MWF 9:00 – 9:50
Dr. Anneke Bart

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Text: *Discrete Mathematics* by Richard Johnsonbaugh, 6th edition, 2006

Prerequisite: Math 120 or equivalent

Objectives:

Familiarize students with concepts from Discrete Mathematics as outlined by the ACM and IEEE.

Units Covered:

- Functions, Relations and Sets
- Basic Logic (Boolean algebra, logical connectives, truth tables, etc.)
- Proof techniques (direct proofs, proof by contradiction, proof by induction).
- Elementary Number Theory (factorization, primes, greatest common divisors and least common multiples, etc)
- Basic Algorithmic Analysis
- Complexity.

The materials will cover (but may not be limited to) chapters 1, 2, 4, 5, and 7

Grades: A (94-100%), A- (90-93%), B+ (87-89%), B (84-86%), B- (80-83%), C+ (77-79%), C (74-76%), C- (70-73%), D (60-69%), F (< 60%)

Grading:

Three Exams – 20%, 15%, 15% (highest grade counts as 20%)

Final – 35% The final will be cumulative.

Homework, quizzes and in-class work – 15%

Not taking the final will result in an automatic F.

Breaks and Holidays:

Spring / Easter Break – March 17 - 24; Classes resume Tuesday March 24.

Last day of Class: May 5 (Monday)

Tentative Schedule

Chapter 1 : 1.1 – 1.5 and 1.7 ca 3 weeks

Exam 1

Chapter 2 : 2.1 – 2.3 ca 2 week

Chapter 4 : 4.1 – 4.4 ca 3 weeks

Exam 2

Chapter 5 : 5.1 – 5.4 ca 3 weeks

Chapter 7 : 7.1 – 7.3 ca 2 weeks

Exam 3

Final Exam: Wednesday May 7, 2008 8:00 – 9:50 am.

Homework: Homework will be assigned regularly. As a rule of thumb I will not answer questions on the day the assignment is due. Start on the assignments in a timely manner so that you can get help if needed. Feel free to ask an extension if you need one. Late homework will receive no credit. Note that you need to work on the problems so that you will be prepared for the exams.

Exams: I will announce the exams at least a week in advance. Often (but not always) the students will have a say in the scheduling of the exams.

Making up work / exams: Make-ups are only given in the case that the reason for the absence is documentable, unavoidable and out of the control of the student. Medical emergencies are an example. Making a hair appointment, being on vacation etc are not reasons for a make-up.

Attendance: Experience tells us that students who skip class usually have a difficult time learning the material on their own.

Academic Honesty: Any instance of cheating will automatically result on a grade of F on the assignment/test, and will be reported (and hence possibly result in further university level sanctions such as probation or expulsion). It should be noted that a lot of cheating occurs unintentionally. Always citing your sources, and never presenting someone else's work as your own can prevent problems.

Disability Services:

“Saint Louis University is committed to providing equal access to employment and educational opportunities for persons with disabilities. The objectives are to enable persons with disabilities in the University to function adequately, both personally and professionally.”

If you have special needs, these must be documented with the disabilities office:

Coordinator, Office of Disabilities Services, 977-2930, Room 131,
Academic Resources Center,
3840 Lindell Blvd.;

Confidentiality will be observed in all inquiries.

Students are responsible for making the necessary arrangements at exam time.

Cell phones: Cell phones need to be turned off during class and may definitely not be used for any purpose during exams.