

1. General Information

	<u>Instructor: H. K. Dai</u>	<u>Teaching Assistant: M. N. A. Khan</u>
Office Location:	Mathematics, Statistics, and Computer Science Building Room 209	Room 312
Office Hours:	Tuesday/Thursday 01:00 – 02:00 (or by appointment)	Monday 10:00 – 12:00 and Wednesday 11:00 – 12:00
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Universal Resource Locator:	http://www.cs.okstate.edu/~dai/	

2. Course Description in Current University Catalog

CS 3653: Discrete Mathematics. Prerequisites: MATH 2145 (Calculus I). Theory and applications of discrete mathematical models fundamental to analysis of problems in computer science. Set theory, formal logic and proof techniques, relations and functions, combinatorics and probability, undirected and directed graphs, Boolean algebra, switching logic.

3. Course Goals

Discrete Mathematics deals with computations involving a finite/discrete number of steps, rather than a limiting process. Discrete mathematics supports many areas of computer science (design and analysis of algorithms, complexity theory, artificial intelligence, programming languages, etc.) and many branches of mathematics (combinatorics, graph theory, combinatorial optimization, number theory, coding theory, etc.).

4. Course Materials and References

1. Text: [Ros07] K. H. Rosen. *Discrete Mathematics and Its Applications*. McGraw-Hill, Recent Edition (2007).
2. Solution manual for students (read [Ros07] Preface to the 6th Edition).
3. Lecture notes (sketchy): from course instructor.
4. Class pages (<http://www.cs.okstate.edu/~dai/course/CS3653/2009fall/2009fall.html>).

5. Homework and Examinations

There will be about 8–10 homework assignments (and possibly some in-class quizzes), 2 tests, and 1 final examination.

6. Course Grade

The course grade is based on the homework and in-class quizzes (35%), two tests (17.5% each), and final examination (30%). The passing letter-grade is determined by the following partition of the course grades:

D : [50, 60); C : [60, 70); B : [70, 85); and A : [85, 100]

7. Miscellaneous

1. **Lectures:** Lectures are not mandatory, but historically, students with active attendance have done significantly better on examinations than their less frequently attending classmates.
2. **Homework:** Problem sets form an important part of the learning in the course, and thus, you are required to do them in order to pass.
3. **Collaboration:** You are encouraged to collaborate in study groups on the solution of the homework. If you do collaborate you must write up solutions on your own and acknowledge your collaboration in the write-up for each problem. If you obtain a solution with help (e.g., through library work, another student, etc.), acknowledge your source, and write up the solution on your own.

8. Student Disability Services

Student Disability Services and other Student Services are committed to providing support services to students with physical and learning disabilities. Please advise the instructor of desired academic accommodations, and notify Student Disability Services.

9. Academic Dishonesty or Misconduct

Refer to the section in “University Academic Regulations” in current University Catalog (<http://www.okstate.edu/registrar/Catalogs/Catalog.html>)

10. Adding/Dropping/Withdrawing, Important Dates, and Syllabus Attachment

1. **Tests and Final Examination:** Tentative dates for the tests are September 22 (Tuesday) and November 3 (Tuesday), 2009.

Adopting “Fall 2009 Final Examination Schedule” in University Class Schedule for Fall 2009, the firm time/date for final examination is 02:00 – 03:50 pm, December 8 (Tuesday), 2009 in regular class meeting place.

Refer to:

<http://www.okstate.edu/registrar/AcademicCalendar/AcademicCalendarMain.html>

2. **Adding/Dropping/Withdrawing and Important Dates:** Refer to:
<http://www.okstate.edu/registrar/AcademicCalendar/AcademicCalendarMain.html>

3. **Syllabus Attachment:** Refer to:
<http://osu.okstate.edu/acadaffr/aa/CurrentStudents.htm>