

Department of Computer Science
CS 2210:0001 (22C:019:001) Discrete Structures
Spring 2015

Instructor

Sukumar Ghosh, 201P Maclean Hall, 319-335-0738, sukumar-ghosh@uiowa.edu

Class meeting time: 2:00-3:15 PM MWF, 110 MLH (Semester hours: 3)

Office hours: 3:30-5:00 PM Tuesdays and Thursdays, or by appointment

(DEO: Professor Alberto Segre, 14 MLH)

Teaching Assistant

1. Thamer Alsulaiman, Office and Office hours to be announced.

2. Chao, Yong, Office and Office hours to be announced

Textbook. Discrete Mathematics and Its Applications 7/E, by Rosen, McGraw-Hill, ISBN 978-0-07-338309-5

Note. There are many things that remained unchanged during the transition from the 6th to the 7th edition. Other than some (minor) reorganization of the chapter contents, the new edition has newer examples, explanations, and additional exercises. That said, you may still use the 6th edition without much problem, but you have to be responsible for keeping track of the differences. Some exercises from the 7th edition, *may not* be available in the 6th edition, and it will be your job to do the correct exercise. The same things will apply to readings too.

Course Description

This is an introduction to mathematical methods used in studying problems of computer science. The topics covered include: mathematical logic; proof techniques, especially mathematical induction; set theory, functions, and relations; procedures, recursion, and operation counts; recurrence relations; analysis of algorithms; counting methods, permutations and combinations; graphs and trees.

Tests and assignments

There will be six home assignments (4% x 6=24%), and four quizzes (4% x 4 = 16%), two midterm exams (15% x 2 = 30%) and a final exam (30%). Quizzes and midterm examinations will be held during the class period. *The duration of each quiz is 15 minutes and will be given at the beginning of a class period.*

For each semester hour of credit in the course, students should expect to spend approximately two hours per week preparing for class sessions.

Examination Schedule

Exam 1: February 24, 2015, Monday, (in class)

Exam 2: March 31, 2015, Monday, (in class)

Final Exam date to be announced

Letter grades will be tentatively assigned roughly as follows:

A+ = 95-100

B+ = 80-84

C+ = 65-69

D+ = 50-54

A = 90-94

B = 75-79

C = 60-64

D = 45-49

A- = 85-89

B- = 70-74

C- = 55-59

D- = 40-44

F = 0-39

The instructor reserves the right to make minor modifications in the grading scale.

Course webpage <http://www.cs.uiowa.edu/~ghosh/1914F.html>

Assignments will also be posted on ICON, and completed assignments must be submitted via ICON. *Late assignments will not be accepted without prior approval.*

FAQ: <http://www.cs.uiowa.edu/~ghosh/faq15.pdf>

The College of Liberal Arts and Sciences Policies

Administrative Home of the Course

The administrative home of this course is the College of Liberal Arts and Sciences, which governs academic matters relating to the course such as the add/drop deadlines, the second-grade-only option, issues concerning academic fraud or academic probation, and how credits are applied for various graduation requirements. Different colleges may have different policies. Students with questions about these or other CLAS policies should speak with an academic advisor or with the staff in 120 Schaeffer Hall. Also see the CLAS Academic Handbook:

http://www.clas.uiowa.edu/students/academic_handbook/index.shtml

Academic Honesty

The College of Liberal Arts and Sciences expects all students to do their own work, as stated in the CLAS Code of Academic Honesty. Instructors fail any assignment that shows evidence of plagiarism or other forms of cheating, also reporting the student's name to the College. A student reported to College for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled. See the Code for Academic Honesty in <http://clas.uiowa.edu/students/handbook/academic-fraud-honor-code>

Attendance

Students are expected to attend all lectures, do the assigned homework and take the exams and quizzes. University policy requires that students be permitted to make up examinations or quizzes missed because of unavoidable circumstances like illness, mandatory religious obligations or certain University activities. For details, see <http://clas.uiowa.edu/faculty/teaching-policies-resources-student-absences>

Making a Suggestion or a Complaint

Students have the right to be involved with their academic community and to make suggestions or complaints. Students are encouraged to visit with the instructor, with the course supervisor, and with the departmental DEO. Discrepancies in grades or exam/assignment scores should be brought to the notice of the instructor within a week from the date the grade is assigned. Student complaint against faculty actions should be brought to the attention of the instructor, department, and if necessary the Associate Dean as soon as possible as soon as possible and always within six months of a specific incident. For more information visit <http://www.clas.uiowa.edu/students/handbook/x/>

Accommodations for Disabilities

The University upholds actions of diversity and inclusion. Under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, instructors provide reasonable academic accommodations for qualified students with disabilities. Students seeking academic accommodations first register with Student Disability Services and meet with a counselor in that office who reviews documentation and determines eligibility for services. Students approved for accommodations arrange to meet privately with course instructors. Visit Student Disability Services at <http://www.uiowa.edu/~sds/>

Understanding Sexual Harassment

Sexual harassment is reprehensible and will not be tolerated by the University. It subverts the mission of the University and threatens the well being of students, faculty, and staff. Visit <http://www.sexualharassment.uiowa.edu/> for definitions, assistance, and the full University policy.

Reacting Safely to Severe Weather

If the National Weather Service radar indicates a tornado or other severe weather, then the UI outdoor weather sirens will sound. The class will seek appropriate shelter immediately, continuing class if possible when the event is over.