

Syllabus – Discrete Mathematics**Spring 2012**

Instructor	Teaching Assistant
Cole Sherer Email: koleslaw@uga.edu Office: 223B Office Hours: Wednesday 1:15 – 3:15	To Be Announced...

Meeting Times	Location
Tuesday & Thursday 12:30 – 1:45	Boyd 322
Wednesday 12:20 – 1:10	Aderhold 116

Required Textbook	
<i>Discrete Mathematics and Its Applications</i> (7th Edition). Kenneth H. Rosen, ISBN: 978-0-07-338309-5	

Grading			
Evaluation Method	Quantity	Points	Percentage
Unannounced Quizzes	10	100	12.5%
Homework	8	200	25%
Midterm Exams	3	300	37.5%
Final Exam	1	200	25%

Honor Policy
<p>As a University of Georgia student, you have agreed to abide by the University's academic policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: www.uga.edu/honesty. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.</p> <p>Common forms of academic dishonesty against which student should guard include 1) copying from another student's test paper or laboratory report, or allowing another student to copy from you; 2) fabricating data for an assignment; 3) helping another student to write a laboratory report or computer software code that the student will present as his or her own work, or accepting such help and presenting the work as your own; 4) turning in material from a public source such as a book or the Internet as your own work.</p>

Exams
<p>Students may request to take an exam prior to the examination date. This request must be made at least one week prior to the scheduled examination date. Students who do not make such a request and are not in attendance on the examination date have an opportunity to take the exam at a different time only under exceptional circumstances, such as family or medical emergencies, and must have this absence approved by the Dean of Students office.</p>

Homework

Each homework assignment will include formatting instructions, delivery instructions, and deadline. In order to be eligible for credit, submissions must conform to each of these requirements. The late policy for the assignment will be explicitly listed on each assignment.

Re-grade Requests

Students may request a re-grade of any graded material. To make a request, a student should submit a written justification for the request and include the assignment. Students should be aware (perhaps beware) that such requests could result in a lower grade being assigned. Any request must be made within 7-days after the instructor returns the graded material, regardless of whether the student is in attendance. For example, if the instructor returns the material on a Wednesday, then the student has until the end of class on the following Wednesday.

Withdrawals

Please see me (your instructor) before initiating a withdrawal from the course—you owe it to yourself to know your current standing in the course. Generally speaking, a withdrawal grade of WP is assigned to those students who have been in ample attendance of the course and have a current course average of 50% or higher. Students who seek to withdraw from the course who have not made an attempt to attend class are likely to receive grades of WF.

Accommodations

Students who require accommodations based on a disability of any kind should follow the procedures outlined by the UGA Disability Resource Center. I am happy to help anyone with a disability by providing any reasonable accommodations, but I cannot provide them until I receive appropriate documentation.

Communication

The instructor will communicate through announcements on eLC and will use eLC to send out email. It is required that students check their uga.edu email and eLC at least once a day. When emailing the instructor or TA, please include a [cs1302] tag in the subject line. Please allow 24-hours for a response on a weekday, and 48-hours for a response on the weekend or holiday/break.

Mobile Devices

Please put any mobile devices on silent when entering the classroom. If your electronic device sounds in class, it's no big deal as long as you silence it quickly. Please note that I will never take a call or send text messages during class, and I ask that you do the same. Laptops and other mobile devices are not allowed in class. It is difficult to type up notes in and math class, and they are often a form of distraction.

Changes

After the first week of the class, exam dates will be solidified and will not be changed unless unusual circumstances arise. Lecture topics, however, are subject to change. The most current class schedule will be on the course eLC site. Note, however, the official UGA policy for syllabi is, "The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary."

Goals

Broadly stated, there are the following goals for this class:

- 1) Become better acquainted with solid mathematical reasoning

- 2) Learn the basics of combinatorics to better count problems and analyze algorithms
- 3) Learn to work with discrete data structures like sets, permutations, graphs, etc.
- 4) Improve your ability to think algorithmically
- 5) Preview mathematical concepts that will be encountered throughout your computer science education and career

Class Schedule

Day	Date	Topic	Reading
T	01/10/12	Welcome, Course Policies, Propositional Logic	Ch 1.1
W	01/11/12	Propositional Logic	Ch 1.2 – 1.3
R	01/12/12	Propositional Logic	Ch 1.4 – 1.5
T	01/17/12	Inference	Ch 1.6
W	01/18/12	Proofs	Ch 1.7 – 1.8
R	01/19/12	Proofs	
T	01/24/12	Sets	Ch 2.1 – 2.2
W	01/25/12	Functions	Ch 2.3
R	01/26/12	Sequences and Summations	Ch 2.4
T	01/31/12	Matrices	Ch 2.6
W	02/01/12	Test Review	
R	02/02/12	Exam 1	
T	02/07/12	Go Over Exam 1	
W	02/08/12	Boolean Logic	Ch 12.1
R	02/09/12	Logic Gates	Ch 12.2 – 12.3
T	02/14/12	Algorithms	Ch 3.1
W	02/15/12	Growth of Functions	Ch 3.2
R	02/16/12	Complexity	Ch 3.3
T	02/21/12	Induction	Ch 5.1 – 5.2
W	02/22/12	Induction	
R	02/23/12	Recursion	Ch 5.3 – 5.4
T	02/28/12	Counting	Ch 6.1
W	02/29/12	Permutations	Ch 6.3
R	03/01/12	Binomial Coefficients & Permutations	Ch 6.4 – 6.6
T	03/06/12	Test Review	
W	03/07/12	Exam 2	
R	03/08/12	Go Over Exam 2	
T	03/13/12	Spring Break	
W	03/14/12	Spring Break	
R	03/15/12	Spring Break	
T	03/20/12	Discrete Probability	Ch 7.1 – 7.2
W	03/21/12	Bayes' Theorem	Ch 7.3
R	03/22/12	Expected Value and Variance	Ch 7.4
T	03/27/12	Recurrence Relations	Ch 8.1 – 8.2
W	03/28/12	Divide and Conquer	Ch 8.3
R	03/29/12	Generating Functions	Ch 8.4
T	04/03/12	Relations	Ch 9.1 – 9.2
W	04/04/12	Relations	Ch 9.3 – 9.5

R	04/05/12	Test Review	
T	04/10/12	Exam 3	
W	04/11/12	Go Over Exam 3	
R	04/12/12	Intro to Graphs	Ch 10.1 – 10.2
T	04/17/12	Graphs, Connectivity, Euler & Hamiltonian Paths	Ch 10.3 – 10.4
W	04/18/12	Shortest Path and Planar Graphs	Ch 10.6 – 10.7
R	04/19/12	Graph Coloring, Intro to Trees	Ch 10.8, Ch 11.1
T	04/24/12	Tree Applications and Traversals	Ch 11.2 – 11.3
W	04/25/12	Spanning Trees	Ch 11.4
R	04/26/12	MSTs, Review for Final	Ch 11.5
T	05/01/12	<i>Reading Day</i>	
W	05/02/12		
R	05/03/12	Final Exam	12:00 – 3:00

UGA has an official policy for dealing with exam conflicts. To find this information, in addition to the official schedule of final exams, visit:

<http://www.reg.uga.edu/calendars/final-exam-dates/finalExamDatesSpring2012>

Welcome to **CSCI 2610!**