Discrete Mathematics for Computer Science

CS 3653  Dr. Douglas R. Heisterkamp
NH 261  NH 321
4:30-7:10 p.m. Thursday 918-200-9377
Fall 2022  doug@cs.okstate.edu

Course Catalog Description: Prerequisite: MATH 2144 with a grade of “C” or better. 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.


1. Click any zyBook assignment link in CS 3653’s canvas course.
2. Subscribe

Office Hours:  
Wednesday, 2:00-3:30, zoom meeting; invite on canvas  
Thursday, 2:00-3:30, OSU-Tulsa and zoom meeting; invite on canvas  
Other times available by appointment.

Grading: Exam 1 20%  Grading Scale: for score x in  
Exam 2 20%  90% ≤ x  A  
Final Exam 20%  80% ≤ x < 90%  B  
zyBook Participation Activities 10%  70% ≤ x < 80%  C  
zyBook Challenge Activities 10%  60% ≤ x < 70%  D  
Online Quizzes 10%  x < 60%  F  
Written Homework 10%

Dates:  
Exam 1 : September 29, 4:30-6:30 p.m.  
Exam 2 : November 3, 4:30-6:30 p.m.  
*Thanksgiving* – class does not meet : November 24  
Final Exam : December 15, 6:00-7:50 p.m.

Examinations: During an examination period, no communication of any kind about the exam (except with the instructor or proctor) is allowed.

Assigned work: Assignments may be turned in using the dropbox on canvas. Please use a high resolution black and white scan for hand written exercises. Written exercises may
also be turned in during class. If written assignments are turned in late, they lose a percentage of their graded point values according to the following schedule:

<table>
<thead>
<tr>
<th>Written Exercises</th>
<th></th>
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<tbody>
<tr>
<td>On time</td>
<td>0%</td>
</tr>
<tr>
<td>One week</td>
<td>25%</td>
</tr>
<tr>
<td>Two week</td>
<td>50%</td>
</tr>
<tr>
<td>More than two week</td>
<td>100%</td>
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**zyBook participation activities** for each week will be due at 4:00 p.m. before class each week, except for the first week of classes. They are the interactive activities associated with the textbook’s reading sections for the week. The table of contents for the zybook will be organized into weekly chapters to make it easy for you to determine what you should be reading. Conducting 80% of the participation exercises will provide the full 10% grade score. That is, you can miss up to 20% without a penalty.

**zyBook challenge activities** will be due at 11:59 p.m. on Mondays. They are the challenge activities associated with the previous week’s textbook’s reading sections. Conducting 80% of the challenge exercises will provide the full 10% grade score. That is, you can miss up to 20% without a penalty.

**Online quizzes** will be available for two weeks on canvas without late penalty. You may take each quiz up to three times. The highest score obtained will be used the quiz score.

**Collaboration:** Discussion of concepts, ideas, and techniques is allowed. After discussion, each student must write up his/her own solution. Copying another person’s work, in part or whole, is not allowed. Giving another student your work, in part or whole, is considered cheating as well. If you are unsure whether your collaboration is acceptable, speak with the instructor in advance. Any violation of academic integrity would result in a non-droppable grade of zero for that assignment and an additional reduction of one letter grade in the course and a report to the university administration. Major violations will result in a grade of F!.

**Disabilities act:** If any student feels that he/she has a disability and needs special accommodations of any nature whatsoever, the instructor will work with you and the Office of Disabled Student Services to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this class. Please advise the instructor of such disability and the desired accommodations at some point before, during, or immediately after the first scheduled class period.


All students are expected to follow university COVID-19 guidelines as they exist at the beginning of the semester and adapt to them as they may change during the semester.