MANHATTAN COLLEGE
Syllabus

Course Title: **Discrete Structures**
Course Number: **CMPT 335**
Section Number(s):   **01**
Semester: **Fall**
Year: **2013**

Course Description
A study of structures most frequently encountered in computer science: graphs, trees, search algorithms, recurrence relations and coding theory. Fall. Prerequisite: CMPT 102 or CMPE 202 or EECE 202.

Class Meeting Times
Lecture │ 1:00-1:50 PM │ TWF │ LEO 238

Instructor's Name: **Dr. Tyler Markkanen**
Office Location: **RLC 200A**
Office Hours: **TBD – See HW 0**
Contact Information: **tyler.markkanen@manhattan.edu**
                       (718) 862-7831

Required Textbook
Susanna S. Epp. *Discrete Mathematics with Applications, 4th Edition.*
ISBN-13: 9780495391326

Subject Material Covered in the Course
We will cover some or all of the sections in each of the following chapters:
Chapter 1: Speaking Mathematically
Chapter 2: The Logic of Compound Statements
Chapter 3: The Logic of Quantified Statements
Chapter 4: Elementary Number Theory and Methods of Proof
Chapter 5: Sequences, Mathematical Induction, and Recursion
Chapter 11: Analysis of Algorithmic Efficiency
Chapter 10: Graphs and Trees

Outcome Expectations
• Become proficient in areas of mathematics that are especially relevant to computer science
• Master the use of mathematical induction in proofs
• Improve one's ability to mathematically reason about programs
• Have an improved faculty for mathematical proof
• Be more adept and comfortable with mathematical language
• Become familiar with the basics of theoretical computer science.

Howework Assignments and Suggested Exercises
• For each section of the textbook, there will be a problem set to hand in. Each assignment will have approximately 10 problems. Only about **three of them will be graded (these will be indicated by a *)**, but you must give an honest attempt at the (approximately) 7 non-graded problems to get full credit for the assignment. Due dates will be announced as the semester

progresses. ALL WORK and steps must be clearly shown. Remember, office hours are a good place to get homework help.

First Assignment: §1.2 p. 13 #1, 3, 4*, 5*, 6, 7acd, 8a, 9abi, [10bd]*, 12

Due: Tues 9/3

The * problems will be graded, but you must hand in all 10 problems.

- **HW 0:** Logon to the course website on **Moodle** at **https://lms.manhattan.edu.** Click on the **My Schedule** link. Fill out and submit the schedule form that comes up.
  HW 0 IS DUE BY THURSDAY 8/29 AT 11:55 PM.

Dates and Times of Quizzes and Exams

- **QUIZZES:** There will be five announced quizzes. They will be given **in class** on the following Fridays: 9/6, 10/4, 10/11, 10/18, and 11/8. There will be occasional **pop quizzes** too!
- **EXAMS:** There will be **three in-class exams** and a **common cumulative final exam.** The dates of the exams are shown below

EXAM	DATE	TIME
Exam 1	Fri 9/20	In-Class
Exam 2	Fri 10/25	In-Class
Exam 3	Tues 11/26	In-Class
Final Exam	Tues 12/10	1:30-3:30 PM, in LEO 238

Grading Method, Extra Credit Assignments, and Make-Up Policy

- *GRADE:*

Grade Category	Percentage of Final Grade
Class Participation	5%
Homework	20%
Quizzes	10%
Exams (3)	15% (each)
Final Exam	20%

- *EXTRA CREDIT:* There will be occasional extra credit opportunities. Details will be announced as the semester progresses.
- *MAKE-UPS:* Make-up quizzes and exams are generally not allowed unless you tell me **in advance** that you will be absent on a quiz/exam day. After solutions to a quiz have been posted, make-ups for that quiz will not be allowed.

Attendance Policy

You are expected to attend each class. Please come to class prepared and ready to learn. Ask questions and make helpful comments. Be ready to participate in class discussions and activities. If you miss class, you are responsible to get the notes and assignment details from someone in the class, as well as any handouts. **You must notify me IN ADVANCE if you will be absent on a quiz/exam day.**

Expected Academic/Professional Conduct

- All written work must conform to Standard English usage. Failure to meet such standards will affect your grade.
- When placed on your assignments, your name verifies that the work is your own.
- All Manhattan College students are expected to maintain the highest standards of academic and personal integrity. Any violations of academic integrity like exam cheating, facilitation of dishonesty, plagiarism, i.e., copying from any source (e.g., classmates, published sources, and the Internet) for an assignment without proper quotation and citation, will be dealt with in accordance with the student handbook of Manhattan College and will result in disciplinary penalties.

Students with Disabilities

Qualified students with disabilities will be provided reasonable academic accommodations if determined to be eligible by the Specialized Resource Center. Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility from the Specialized Resource Center, which is located at Miguel Hall, Room 301B. It is the student's responsibility to initial contact with the Specialized Resource Center staff and to follow the established procedures for having the accommodation notice sent to the instructor.