CONCORDIA UNIVERSITY DEPARTMENT OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING

COMP 339/MATH 339 Combinatorics Fall 2020

Course Outline

Instructor: Hovhannes Harutyunyan, office: EV 003.155, email: haruty@cs.concordia.ca
Classes: Tuesday, Thursday 10:15 - 11:30, classes will be online
Tutorials: Monday 11:45 - 13:35, Wednesday 11:45 - 13:35, given online by
Aria Adibi, email: aria.a1995@gmail.com
Jesse Racicot, email: JesseRacicot@hotmail.com
Assignment marking: Aria Adibi, email: aria.a1995@gmail.com
Office hours: Online

Course Description: General principles of counting, permutations, combinations, identities, partitions, generating functions, Fibonacci numbers, Stirling numbers, Catalan numbers, principle of inclusion and exclusion. Graphs, subgraphs, isomorphism, Euler graphs, Hamilton paths and cycles, planar graphs, Kuratowski's theorem, trees, colouring, 5-colour theorem, matching, Hall's theorem.

Graduate Attributes: Use mathematical knowledge and proof techniques to analyze problems related to computer science.

Textbook: Discrete and Combinatorial Mathematics: An Applied Introduction (fifth edition) by Ralph P. Grimaldi, Addison-Wesley, 2003, ISBN 0-201-72634-3.

Course website: Please regularly consult the course website for supplementary material, assignments, important dates, and all other information about the course.
For Announcements, Exam and Assignment due dates follow the file: COMP339-2020-Webpage.doc

Attendance: Students are responsible for making themselves acquainted with all materials presented in lectures and assigned for reading.

Assignments: Please submit your assignments to the ENCS's Electronic Assignment Submission (EAS) system: https://fis.encs.concordia.ca/eas/. You will need an ENCS username and password to login (go to H960 to pick up a user name and password).

Marking Scheme:
Assignments - 30%
Midterm Exam - 30% on October 20, 2020 (in class)
Final Exam - 40% in December 2020

Important: In order to pass the course, a student must pass the term component (Assignments + Midterm) and the Final Exam component. Late assignments will not be accepted.

Prerequisite: COMP 232 or 18 credits in post-Cegep Mathematics.

Disclaimer: In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.