

MATH 3330: Applied Graph Theory

Course Information:

Session:	Fall 2011
Time:	Tuesday, Thursday 2:35-3:55 pm
Room:	LSC-common area C334
Course webpage:	http://www.mathstat.dal.ca/~ghandeh/MATH3330

Instructor:

Instructor:	Mahya Ghandehari
Email:	ghandeh@mathstat.dal.ca
Office:	Chase 253
Office Hours:	Tuesday and Thursday 12:00-1:30 pm (also by appointment)

Evaluation:

Homeworks	20%
Midterm 1 (Monday October 3rd, 6-7 pm)	15%
Midterm 2 (Tuesday November 15th @ class time)	20%
Final (3 hours, scheduled by the registrar)	45%
Bonus questions	5%

Grade Equivalents:

90-100 A^+	75-79.9 B^+	62-64.9 C^+		
85-89.9 A	70-74.9 B	58-61.9 C	50-54.9 D	<50 F
80-84.9 A^-	65-69.9 B^-	55-57.9 C^-		

1 Course Description

Introduction to graph theory, with an emphasis on applications and modeling. Topics include: paths and cycles, shortest route problem, connectivity and trees, minimum spanning trees, network flow, planar graphs, matchings, assignment problems, graph coloring and applications to scheduling, Hamilton cycles, and the Traveling Salesman Problem.

2 Textbook

The lecture notes will be self-contained. For additional reading material refer to the following books.

- *Graph theory and its applications*, Second Edition by Jonathan L. Gross and Jay Yellen.
- *Introduction to graph theory*, Second Edition by D.B. West.

3 Assignments

There will be 7 assignments each worth approximately 3% towards your overall grade. Assignments are going to be available online as scheduled below:

Assignment 1	September 15th
Assignment 2	September 22nd
Assignment 3	October 6th
Assignment 4	October 20th
Assignment 5	November 1st
Assignment 6	November 17th
Assignment 7	November 29th

The due dates are going to be announced. Late assignments (5 minutes to two days) will be penalized 10%.

4 Missed test policy

A missed midterm cannot be written at another time, and will be count as a 0. Exceptions are made if you have an officially valid excuse such as a medical doctor's note. In such cases, the weight of the missed midterm will be shifted to the final exam. There is no make-up option for the final exam.

5 Academic Integrity

You are allowed to discuss homework problems with your classmates, but the write-ups should be done individually, without access to the papers of fellow students. Most importantly, work submitted for this course must represent your own efforts. Copying assignments or tests from any source, completely or partially, will not be tolerated. (See <http://academicintegrity.dal.ca/> and the links therein for more information).

6 Syllabus Statement on Accommodation

Students may request accommodation as a result of barriers related to disability, religious obligation, or any characteristic under the Nova Scotia Human Rights Act. Students who require academic accommodation for either classroom participation or the writing of tests, quizzes and exams should make their request to the Office of Student Accessibility & Accommodation (OSAA) prior to or at the outset of each academic term (with the exception of X/Y courses). Please see www.studentaccessibility.dal.ca for more information and to obtain Form A - Request for Accommodation.

A note taker may be required to assist a classmate. There is an honourarium of \$75/course/term. If you are interested, please contact OSAA at 494-2836 for more information.

Please note that your classroom may contain specialized accessible furniture and equipment. It is important that these items remain in the classroom so that students who require their usage will be able to participate in the class.