

## MATH 1300-D WEEKS 1–2

SECTIONS 4.1–3; PAGES 142–172

### SECTION 4.1

**Reading.** Make sure that you understand what is behind the following words:

- (1) Edges, vertices, and degree of a vertex.
- (2) Connected graph.
- (3) Euler’s theorem, Euler path, and Euler circuit.
- (4) Fleury’s algorithm.
- (5) Eulerizing a graph.

**Self-assessment.** To verify that you have understood the material, solve the following problems at the end of the section: 1–4, 17, and 35.

### SECTION 4.2

**Reading.** Make sure that you understand what is behind the following words:

- (1) Hamilton path, Hamilton circuit.
- (2) Complete graph.
- (3) Weighted graph.
- (4) Algorithms for solving the Traveling Salesperson Problem: Brute Force, Nearest Neighbor, and Best Edge

**Self-assessment.** To verify that you have understood the material, solve the following problems at the end of the section: 1–2, 8, 16, and 25.

Now take Quiz 1; you need to score 75% on this quiz before you can start working Homework 1, which is due on Thursday 28 January.

### SECTION 4.3

**Reading.** Make sure that you understand what is behind the following words:

- (1) Directed edge and directed graph.
- (2) Length of directed path.

**Self-assessment.** To verify that you have understood the material, solve the following problems at the end of the section: 2, 4, 8, and 10.

Now take Quiz 2; you need to score 75% on this quiz before you can start working Homework 2, which is due on Monday 1 February.

Written Homework A is also due on Monday 1 February; see the announcement in MyMathLab.