Homework Assignments

Your work on the homework assignments is an important part of this course because it allows you to consolidate and integrate what you have learned. You are expected to spend at least two hours on homework each day outside of class.

This course has been designated as a Writing Intensive Course for mathematics and computer science students. This means there will be opportunities for you to develop your ability to express mathematical ideas in writing. To that end, each assignment will include exercises labeled with *, where you explain your solution in complete sentences, and Science and Technology of Consciousness questions, which you should answer in two or more sentences.

Each homework assignment will be discussed at the beginning of the next day, corrected during the day, and submitted to TEAMS by 4 pm that day. Late homework will not be accepted except for illness or personal emergency. Neatness, legibility, correct grammar, punctuation, and spelling are expected. Please see the instructions for writing up homework assignments.

You are expected to have worked both the practice problems and the assignment problems before coming to class the next morning and to be prepared to discuss and present your answers.

Each assignment will be graded on a scale of 10 points. The average of all assignments will count 10% toward your final grade.

Lesson 2. Graphs (10 points)

Practice problems (do not hand in)

> Section 2.6 pp. 183–185: 1, 2, 4
> Section 10.3 pp. 675–678: 2, 4, 6, 8, 10, 12, 14, 16, 26, 28, 30, 32, 34, 38, 42

Assignment 2. Submit your solutions on TEAMS.

> Section 2.6 pp. 183–185: 14*

> Section 10.3 pp. 675–678: 60*, 66*

> STC Question 1. Why do you think incidence matrices and adjacency matrices are useful? Use a point from the Science and Technology of Consciousness to support your reasoning.

> STC Question 2. Why do you think graph isomorphisms are useful? Use a point from the Science and Technology of Consciousness to support your reasoning.