

For the second project, do ONE of the following:

- (A) Chapter 5, Project 2 - Computer Representations of Graphs: Full description on page 173 of the textbook.

This project asks you to explain how computers can use matrices to represent graphs. Make sure that you answer the questions in the textbook's description of the project, and include at least three examples of graphs and their adjacency and incidence matrices.

Remember to cite your sources appropriately, as you will have to do some research in the library or on the web.

- (B) Chapter 5, Project 3 - The Chinese Postman Problem: Full description on page 173 of the textbook. Although the textbook's description talks about doing a presentation, I want you to write a paper instead.

A Chinese Postman Problem is when you want a circuit that covers all of the edges of a *weighted* graph. It assumes that some edges will be necessarily duplicated. So it is essentially finding an optimal Eulerization of a weighted graph, along with the Euler circuit in that modified weighted graph.

You need to, at least, 1) explain what the problem is, and 2) give a few examples to illustrate the problem (suggestion 1 in the text). You should also cover at least one additional topic (three more suggestions are given in the book).

View your audience as a classmate in this class.

Remember to cite your sources appropriately, as you will have to do some research in the library or on the web.

- (C) Chapter 6, Project 1 - Nearest-Insertion Algorithm: Full description on page 204 of the textbook. Although the textbook's description talks about doing a presentation, I want you to write a paper instead.

Make sure that you include the items indicated in the textbook's description.

View your audience as a classmate in this class.

Remember to cite your sources appropriately, as you will have to do some research in the library or on the web.

This second project is due on **Friday, November 15, 2013**. It can be turned in early, however. In particular, if you wish to do one of the projects from Chapter 5, you might want to do it now.

Remember that each project is worth 4% of your overall course grade.