

# Math 154 Textbook Errata

Last updated: April 28, 2023

# In multiple chapters/not in a chapter

**Page numbering in Index:** the page numbering in the index is offset by two. For example, Kneser Graph is listed in the index as appearing on page 21, but Kneser Graphs appear on page 23 in the text.

# Chapter 1

## Introduction to Graph Theory

(page 21) **Question 1.1.** Point of possible confusion: “components” in part (d). Components are defined in the following chapter (in Section 2.2).

(page 23) **Question 1.9.** Typo: “subsets of an  $n$ -element sets”. Should be “subsets of an  $n$  element set”.

## Chapter 2

# Eulerian and Hamiltonian graphs

(page 27) **Statement of Theorem 2.3.1** “Let  $G$  be a connected multigraph and  $u, v \in V(G)$ ”. Should specify that  $u, v$  are *distinct* (i.e.,  $u \neq v$ ).

(page 27) **Proof of Theorem 2.3.1** “let  $i = \min\{j > 1 : v_j = v_1\}$ ”. Should be “let  $i = \min\{j > 1 : v_j = v_1\}$ ”.

## Chapter 3

# Bridges, Trees and Algorithms

(page 50) Pseudocode for Dijkstra's algorithm, line 11: `alt ← dist[w] + ω(u, w)`.  
Should be `alt ← dist[u] + ω(u, w)`.

## Chapter 4

# Structure of connected graphs

## Chapter 5

# Matchings and Factors

## Chapter 6

# Vertex and Edge-Coloring



## Chapter 7

# Planar graphs

## Chapter 8

# The Max-Flow Min-Cut Theorem

## Chapter 9

# Introduction to Extremal Graph Theory\*

Appendix A

Appendix\*