

Johan Karlsson, January 2025.

## **Reading instructions and preliminary plan for the lectures in SF3810.**

The course is based on the classical book Optimization by vector space methods, by David G. Luenberger.

The following parts of the book are included in the course:

**Chapter 1.** Read on your own as an introduction.

**Chapter 2.** Lectures 1 and 2.

**Chapter 3.** Lectures 3 and 4.

**Chapter 5.** Lectures 5, 6 and 7.

**Chapter 6.** Lectures 8 and 9.

You may skip the proofs in section 6.4.

**Chapter 7.** Lectures 10 and 11.

You may skip the sections marked with a " \* ".

**Chapter 8.** Lectures 12 and 13.

**Chapter 9.** Lecture 14.

You may skip sections 9.5 and 9.6, and also the proof in 9.2.

More detailed requirements for passing the oral exam will be provided later.