Changes – Lecture Notes

- Definition 1.1.2: $\subset$ is now $\subseteq$ and $\subset$ denotes proper subsets.
- Minor changes in the proof of Prop. 1.8.
- Lemma 2.11 - added another term to sharpen the inequality
- Changes of presentation p31-33
- Changes in Section 3.3.1 (definitons and notions)
- Prop 3.18 has a different proof.
- Example 4.2.6 is now 4.2.5 and I have added 3 more examples.
- In the Statements (Lemma, Proposition, Theorem) I have removed the assumption of proper and just deal with closed subspaces.
- Added Example 5.1.2
- Example 5.3.1 is now 5.3.4 and I have added some material to (iv) and added (v).
- Added Prop. 5.15 and Prop. 5.16 as applications of Prop. 5.13.
- Added Prop. 6.12 and 6.16 to provide some motivation for the notion of equivalence of norms.
- Changes in the presentation of the material in the first section of Chapter 7.
- Added Theorem 7.8 and proof
- Added Prop. 7.13. and proof, since it shows the relevance of the concepts developed in the normed space chapter for linear algebra.

Many typos have been spotted by students during the semester and I have not kept track of these changes.