

MAT2400 spring 2012 — Curriculum

The curriculum for MAT2400 spring 2012 is from the notes by Tom Lindstrøm called **Mathematical Analysis** which are found on the homepage of the course.

There are the following exceptions:

2.6 Alternative descriptions of compactness

From this section only the following is included: **Definiton 2.6.1**, **Theorem 2.6.2** and the statement of the **Theorem 2.6.6** (the proof is not included).

3.6 Differential equations revisited

Not included.

3.7 Polynomials are dense in $C([a, b], R)$

The whole section is part of the curriculum, but I gave a slightly different proof of **Theorem 3.7.1** (Weierstrass' Theorem) than the one in the notes. My version is found on the homepage of the course.

3.8 Baire's Category Theorem

Not included.

4.10 The Fejér kernel

Not included.

5.8 $L^1(\mathbb{R}^d)$ and $L^1(\mathbb{R}^d)$

Only the part of this section that concerns $L^1(\mathbb{R}^d)$ is included. That is, what comes before **Theorem 5.8.1** (that theorem and the proof is included).