List of corrections to Tom's notes:

Proposition 2.5.11 on page 41

The word *compact* is missing. The correct statement is:

Proposition 2.5.11 *Let K be a bounded subset of a compact metric space. Then K is totally bounded.*

Theorem 3.4.2 on page 60

In the first line of the theorem, the interval where $\mathbf{f}$ is defined is wrong. The correct statement is:

Theorem 3.4.2 *Asumme that $\mathbf{y}_0 \in \mathbb{R}^n$ and that $\mathbf{f}\colon [0,\infty) \times \mathbb{R}^n \to \mathbb{R}^n$ is continuous and uniformly Lipschitz on $[0,\infty)$. Then the initial value problem*

$$\mathbf{y}'(t) = \mathbf{f}(t, \mathbf{y}(t)) \quad \mathbf{y}(0) = \mathbf{y}_0$$

has a unique solution on $[0,\infty)$.