

# Additional Lecture and Reading Notes

## Lecture 1q

---

I have presented the material in this lecture rather differently than the text. For one thing, I start by defining the matrix for a linear mapping with respect to bases  $\mathcal{B}$  and  $\mathcal{C}$ , whereas the text relegates this discussion to the assignment. (That's why your first practice question is actually a "D" question!) And then I work back towards the idea of a linear operator (where the domain and codomain are the same vector space), and while there is an example where the domain and codomain are both  $\mathbb{R}^n$ , this situation is the starting point in the text. Note that you will be expected to know the definition I stated in this lecture as well as the techniques presented in this lecture, and not just the material in the main part of the text.