Numbers, Sequences & Series

Lecture Notes, T1 2023

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Welcome

These are the Lecture Notes of **Numbers**, **Sequences** & **Series 400297** for T1 2023 at the University of Hull. I will follow these lecture notes during the course. If you have any question or find any typo, please email me at

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Up to date informations about the course and homework will be published on the course webpage

silvio fanzon.com/blog/2023/NSS

A **pdf** version of the notes is available to download on the top-right.

References

We will study curves and surfaces in \mathbb{R}^3 . I will follow mainly the textbook by Pressley [6]. Other references that inspired these notes are the books by do Carmo [2], O'Neill [5] and Bär [1].

I will assume some knowledge from Analysis and Linear Algebra. A good place to revise these topics are the books by Zorich [7, 8]. In addition, it can be helpful to plot curves and surfaces to aid visualization. I will do this with Python 3. I recommend installation through Anaconda or Miniconda. The actual coding can then be done through, for example, Jupyter Notebook. Good references for scientific Python programming are [3, 4].

You are not expected to purchase any of the above books. These lecture notes will cover 100% of the topics you are expected to known in order to excel in the final exam.

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1 Numbers

2 Sequences

3 Series

References

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