

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 information about the course and homework will be published on the **course webpage**

silviofanzon.com/blog/2023/NSS

Homework will also be released on the **Canvas webpage**

canvas.hull.ac.uk/courses/67551

References

We will study the set of real numbers \mathbb{R} , and then sequences and series in \mathbb{R} . I will follow mainly the textbook by Bartle and Sherbert [2]. Other references that inspired these notes are the books by Abbott [1] and Rudin [3].

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

Part I

Numbers

1 Introduction

Part II

Sequences

2 Introduction

Part III

Series

3 Introduction

License

Reuse

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References

- [1] S. Abbott. *Understanding Analysis*. Second Edition. Springer, 2015.
- [2] R. G. Bartle and D. R. Sherbert. *Introduction to Real Analysis*. Fourth Edition. Wiley, 2011.
- [3] W. Rudin. *Principles of Mathematical Analysis*. Third Edition. McGraw Hill, 1976.