

**18.100B FALL 2002
MATERIAL COVERED**

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The final exam will be based on all the material covered from Rudin [1]:

- Chapter 1 All
- Chapter 2 All except Perfect sets.
- Chapter 3 All except Summation by parts, Multiplication of Series, Rearrangements.
- Chapter 4 All
- Chapter 5 All except Differentiation of Vector-valued Functions.
- Chapter 6 All except Integration of Vector-valued Functions and Rectifiable Curves.
- Chapter 7 All except The Stone-Weierstrass Theorem.
- Chapter 8 Only Power series and The Exponential and Logarithmic Functions.
- Chapter 9 The Contraction Mapping Principle.

Note that I said in class that there is very likely to be a question involving the Contraction Mapping Principle.

REFERENCES

- [1] W. Rudin, *Real and complex analysis*, third edition ed., McGraw-Hill, 1987.

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