

# PROGRAM OF ANALYSIS III-MASSTHEORIE HS22 ETH, D-MATH

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For the preparation of the **written exam** you should take as guideline the class content that you find in

<https://people.math.ethz.ch/~fdalio/Analysis3MeasureTheoryHS22>

The following results will not be part of the exam:

- i) CHAPTER 1: Theorem 1.2.21, Theorem 1.4.2, Section 1.7, Theorem 1.9.3, Lemma 1.9.4, Theorem 1.9.5
- ii) CHAPTER 3: Theorem 3.6.5, Theorem 3.6.6, Theorem 3.7.15.
- iii) CHAPTER 4: Theorem 4.3.2, Corollary 4.3.3, Theorem 4.3.4, Theorem 4.4.1, Corollary 4.4.6 (part b)), Proposition 4.4.9, Section 4.5.
- iv) CHAPTER 5: is not part of the exam.

1. As far as Proposition 3.1.19, Lemma 3.1.17, Corollary 3.1.18 , Theorem 3.4.1, Corollary 3.7.8, Theorem 3.7.21, Theorem 4.1.5 are concerned, you have to know only the corresponding statements.
2. For the preparation of the written exam we advise to revise in particular the following exercises from exercises sheets of HS22: **Serie 1: Ex 3,5,6; Serie 2: Ex 1,3,5; Serie 3: Ex 1,2,4; Serie 4: Ex 4,5; Serie 5: Ex 1; Serie 6: Ex 1,2,3; Serie 7: Ex 1,3,4 ; Serie 8:**

**Ex 2,3,6; Serie 9: Ex 2,3,5,6; Serie 10: Ex 5,6; Serie 11: Ex 1,2,3,5,6; Serie 12: Ex 2,3,4,5; Serie 13: Ex 1,2,3,4.**