

Syllabus

Analysis II

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	Position	Associate Professor			Major	Mathematics
	Group	Mathematics				

1. Course Description

We understand the measure theory and Lebesgue integration so that we can easily access them appearing in many mathematical fields.

2. Teaching Methods

This course is based on lectures and homeworks.

3. Evaluation

4. TextBooks

5. Lecture Schedule

Week	Lecture contents	Lesson type	Remark
1	Review: Lebesgue measure, measurable functions, Lebesgue integration		
2	Chapter 7. L_p spaces		
3	Chapter 7. L_p spaces		
4	Chapter 8. Duality and Weak convergence		
5	Chapter 8. Duality and Weak convergence		
6	Chapter 9–12. Abstract spaces: Metric spaces, Topological spaces		
7	Chapter 9–12. Abstract spaces: Metric spaces, Topological spaces		
8	MidTerm Period		
9	Chapter 13. Normed linear spaces		
10	Chapter 16. Hilbert spaces		
11	Chapter 17. General Measure		
12	Chapter 18. General Measure – Integration		
13	Chapter 19. General L_p spaces		
14	Chapter 19. General L_p spaces – Riesz Representation		
15	Review and Further topics		
16	Final Exam Period		

6. Others

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