

TENTATIVE version:

Math 401-2

Real Analysis I

Fall 2018

Instructor: Alex Khapalov, Neill 307
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Lectures: MWF 14:10 – 15:00, Todd 301

Office Hours: MF Neill 307, 15:10-16:00 or by appointment

Homework and other course information will be posted at:
<http://my.math.wsu.edu>

Text: *W. Kosmala, A friendly Introduction to Analysis, 2nd Edition*

Approximate schedule:

Week	Sections	Topics	
1	1.1, 1.4	Sets and techniques of proofs	
2	1.2, 1.5	Relations and functions	
3	1.6-1.8	Some fundamentals	
4	2.1-2.2	Convergence and limit theorems	
5	2.3, 2.4	Series and monotonicity	
6	2.5, 2.6	Cauchy sequences and subsequences	
7	3.2, 3.2	Limits at infinity and at the real numbers	Exam 1
8	3.3, 4.1	One-sided limits and continuity	
9	4.2, 4.3	Properties of continuous functions, discontinuities	
10	4.4, 5.1	Uniform continuity, derivatives	
11	5.2, 5.3	Mean-Value Theorem, properties	
12	5.4, 5.5	L'Hospital rule, higher order derivatives	
13	6.1-6.3	The Riemann integral, properties	
14	6.4, 6.5	Integration	Exam 2
15		TBA	

Grading:

Midterm 100pts
Final exam 100pts

Total 200pts

Tests (2hr) will be based on the homework problems. Each exam is typically 4 problems. The exact exam dates, times and locations will be announced later.

Homework will be assigned weekly from the book and during the lecture (ad-hoc). The exams problems will be selected from the set of the hw problems. The hw will not be graded, but at least 2 problems from the he assignments will be discussed in class every week. Particular requests are welcome - prepare your questions!

Grade. The course grade will be based on your actual total score. The guaranteed grid:
A+>=92>A>=90>B+>=86>=B>=82>B->=80>C+>=76>C>=72>C->=70>D+>=65>
D>=60>F

Some rules: No late assignments will be accepted. However:
you may request a deadline extension, but ONLY prior to the date when the respective assignment is due.
The course grade will be based on your actual total.

Students with Disabilities: Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center or Disability Services. For more information contact a Disability Specialist on your home campus.