

Syllabus: MA 500 Basic Real Analysis, Fall 2016

Instructor: Zhongqiang Zhang

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Office hours: Tuesday 2:00-4:00pm and by appointment

Class meetings: Monday & Wednesday 4:00 - 5:15 pm SH203

Textbook

K. R. Davidson and A. P. Donsig, *Real Analysis and Applications: Theory in Practice*, Springer, 2010.

Course description

This course covers basic set theory, topology of \mathbb{R}^n , continuous functions, uniform convergence, compactness, infinite series, theory of differentiation and integration. Other topics covered may include the inverse and implicit function theorems and Riemann-Stieltjes integration. Students may not count both MA 3831 and MA 500 toward their undergraduate degree requirements.

Grading

Homework = 30% (weekly)

Midterm Exams = 45 % (on Sept. 26 and Nov. 07, in class, closed book and closed notes)

Final Exam = 25% (on Dec. 12, in class, closed book and closed notes)

Grades are given as follows: A (≥ 85), B (≥ 75 , & ≤ 84), C (≥ 60 , & ≤ 74), and NR otherwise.

Grading policy

Make sure that your work is legible and done neatly; otherwise you will receive no credits.

No credits will be given if you have only answers to assignments and exams. You need to show both your answer and the work leading to it with proper wording or expressions. A detailed rubric has been uploaded at the course web page at myWPI (canvas NOT blackboard).

Homework

Problems will be assigned weekly and be posted on myWPI. Make sure that you turn in your homework on time as late homework will not be accepted and will be graded as zero. If you have to miss a class, you may email me your scanned homework.

You are encouraged to discuss homework problems. But you are expected to write your own homework in your own words.

Homework will be due in class on Wednesdays.

Some statements

You are encouraged to attend all the lectures. Though lecture attendance will not be monitored, you will be responsible for knowing everything delivered in class.

Cell phones and all electric devices should be turned off or muted.

Disability services

If you are eligible for course adaptations or accommodations because of a disability or if you have medical information to share with me about, please make an appointment with me as soon as possible. If you are not sure about the eligibility for course adaptations or accommodations, please contact the Disability Services Office (DSO), which is located in the Student Development and Counseling Center, 124 Daniels Hall and the phone number is 508-831-4908, e-mail is DisabilityServices@wpi.edu.

Academic honesty

Each student is expected to familiarize him/herself with WPI's Academic Honesty policies which can be found at <http://www.wpi.edu/offices/policies/honesty>. All acts of fabrication, plagiarism, cheating, and facilitation will be prosecuted according to the university's policy. If you are ever unsure as to whether your intended actions are considered academically honest or not, please contact me.