Math 321/201 Real Variables II 2017W Term 2, Jan-Apr, 2018

Instructor:
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Office hours: See course webpage.


Solutions manual is here: https://minds.wisconsin.edu/handle/1793/67009.
Alternate references:
Tom M. Apostol, “Mathematical Analysis.”
Dr. Feldman has posted some notes at http://www.math.ubc.ca/~feldman/m321/

Topics: The course will be based primarily on topics from Chapters 6, 7, 8, 9 of Rudin:
1. The Riemann–Stieltjes integral (Chapter 6).
2. Sequences and series of functions; uniform convergence (Chapter 7).
3. Power series; special functions; Fourier series (Chapter 8).
4. Functions of several variables; inverse and implicit function theorems (Chapter 9).
5. Other topics as time permits.

Evaluation: There will be homework assignments, two tests, and a final exam.

Homework: Nine assignments will be given and marked for credit. Assignments are due at the beginning of class on the due date. No late assignments will be accepted. The assignment schedule is as follows:

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<thead>
<tr>
<th>Assignment given</th>
<th>Assignment due</th>
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<td>January 5</td>
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<td>April 4</td>
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Tests: There will be two 50-minute tests held during the regularly scheduled class hours on the following dates:
   Wednesday, February 7,       Wednesday, March 21.

The midterms and final exam are closed book: no calculators, formula sheets, or other aids are permitted. Missing a test normally results in a mark of zero. Exceptions may be granted in two cases: prior consent of the instructor or a medical emergency. In the latter case, the instructor must be notified within two working days of the missed test, and presented with a doctor’s note immediately upon the student’s return to UBC. When an exception is granted for a missed test, there is no make-up test, and the final exam mark will be used.

Final exam: There will be a final examination during the April examination period.

Final mark: The final mark will be calculated (subject to possible scaling) as follows:
   Homework: 10% (best 8 assignment marks)
   Tests: 20% each
   Final exam: 50%

Prerequisite: MATH 320.

Updated December 26, 2017.