

MATHEMATICS 321 Section 201
Real Variables II

2016W Term 2, January–April 2017

PREREQUISITE:

- MATH 320

INSTRUCTOR:

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TEXT: Walter Rudin, *Principles of Mathematical Analysis*, third edition.

I will post all handouts, problem sets, etc. on the web at

<http://www.math.ubc.ca/~feldman/m321/>

TOPICS:

0. Differentiation (§5), if it was not covered in Math 320 in term 1
1. The Riemann–Stieltjes integral (§6)
2. Sequences and Series of Functions (§7)
3. Power Series, Special Functions and Fourier Series (§8)
4. If time permits, a supplementary topic like Integration of Differential Forms (§10)

GRADING:

- There will be one midterm accounting for about 25% of the final mark.
- There will be weekly problem sets accounting for about 25% of the final mark.
- The final exam will account for about 50% of the final mark.
- Grades **will probably be scaled**.

POLICIES:

- The midterm and final examination will be strictly closed book: no formula sheets or calculators will be allowed.
- Missing a homework or midterm normally results in a mark of 0. 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 48 hours of the missed test, and presented with a doctor's note immediately upon the student's return to UBC.