

Course Outline:**Math 335 Real Analysis II****Spring 2017****Instructor:** Marcelo Laca

Office: MathBuilding A548

email: laca

Lectures: Tuesdays, Wednesdays and Friday 1:30-2:20 PM

MAC D010

Office hours: Tuesdays 3:30-4:20PM*, Wednesdays 9:30-10:30AM, by appointment or email.

Course Description: Convergence, continuity, differentiation and the Riemann integral for functions on \mathbf{R} and on \mathbf{R}^n . Implicit and inverse function theorems. Sequences and series of functions, uniform convergence. Introduction to metric spaces.

Textbooks: *Introduction to Real Analysis*, by William Trench, Pearson Ed., 2003; available from http://ramanujan.math.trinity.edu/wtrench/texts/TRENCH_REAL_ANALYSIS.PDF, and *Elementary analysis: the theory of calculus*, by K. Ross, Springer, (ch 5 and 6).

Communication: Announcements will primarily be made in class, HW assignments and general course information may also be posted in *coursespaces* and/or sent to your email address listed there.

Homework: There will be 7 Problem Sets due roughly every other Friday (the lowest score will be dropped). To receive full credit, your solutions to the assigned problems must be correct, complete and clear. You will also be required to maintain a high standard of style and presentation compatible with the level of the course. Scribbles, loose pages and pages ripped from a spiral binding are not acceptable and will be returned unmarked.

Evaluation: Your grade in the course will be computed based on the percentage grades on problem sets (PS) and final exam (FE) according to:

$$\text{CG\%} = \text{PS} \times 60\% + \text{FE} \times 40\%.$$

Missing work: Don't! But if you must miss up to two PS for reasons warranting an academic concession, I will compute a fair CG% from the available PS and FE; this may include, at my discretion, shifting up to 20% to selected sections of the final exam that include the missing material. Missing three or more PS scores for any reason is a significant issue that cannot be fixed by reassigning percentages. If it happens, we will need to meet and reassess your standing in the course. If you have a question about your marks on a problem set, you must bring it to my attention in writing within seven (7) calendar days of the date the marked assignment was returned.

Attendance: I expect you to come to class, and so does the university:

<http://web.uvic.ca/calendar2017-01/undergrad/info/regulations/attendance.html#>

Important Dates: Keep an eye on them here: <http://web.uvic.ca/calendar2016-09/GI/2AYeID.html>; finding the relevant ones is an interesting exercise. Do it.

Specific Academic Integrity Issues For This Course: You are welcome, in fact strongly encouraged, to discuss the problems openly with other students and with me, as this is a well-established way to enhance your learning experience. But the problem sets are neither group projects nor exercises in searching the web. If you feel like searching for hints or solutions, don't. Write me an email instead. You must write down each solution in detail by yourself, and you should be able to explain what you did if I ask you. In addition, *you must reference any external source precisely*, as this will allow me to evaluate your personal contribution to the solution. Failure to do this constitutes a breach of academic integrity, which is a serious issue. The full University's Policy on Academic Integrity can be found at

<http://web.uvic.ca/calendar2017-01/undergrad/info/regulations/academic-integrity.html#>

This policy can bite, so make sure you know what it says. If you have any doubt interpreting it, you should bring it up *before submitting your work*. After you submit your work, I will just enforce the policy.