UNIVERSITY
OF MIAMI

Dr. Bruno Benedetti
Ungar Building, office 533
Office hours: Tue 15:30–17:30
(or by appointment: bruno@math.miami.edu)

MTH 309R: Discrete Mathematics

Class: Dooly 103, TuTh 2:00–3:15
Final: Dooly 103, May 5, 2020, 2:00–4:30

Textbook: Levin's *Discrete Matematics: An Open Introduction*, available at `discrete.openmathbooks.org/`.

Content: The tentative outline is

- Counting, sequences and induction (Chapters 1 and 2): 3 weeks
- Logic (Chapter 3): 1 week
- Graph theory: 3 or 4 weeks.
- Modular arithmetics: remaining weeks.

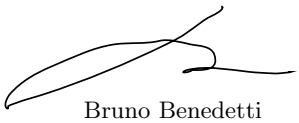
Grading policy:

- Three exams (two midterms and one final). The final weighs double.
- Makeups will be given only in case of documented medical excuse. Please inform me via email.
- Homework will be given weekly in class (except for test weeks). Please take the phone number of a class mate, in case you are absent: don't email me two hours before the deadline asking 'hey bro, did you assign any homework.' Handing in the solution is not compulsory, but strongly recommended. Homework will be collected on Thursdays; all pages should be stapled together; late homework will not be accepted. Homework **is** the preparation for midterms.
- Class participation and homework play an important role in determining final grades, especially in borderline cases.
- Cooperation in homework is allowed, as long as you indicate it clearly on top. (e.g. "Solved exercise 2 together with Luigi and discussed the solution of exercise 4 with Mario".)
- The usual UM honor code applies. My primary goal is to help you learn by explaining, and to certify how well you master the subject; my primary goal is not to pass you all with an A. So do not try shortcuts and do not ask me for shortcuts: Explaining math gives me joy, but you will have to do the learning part yourselves. (For example, the book is full of exercises: Consider them 'free game' for training.) Learning is an **active** process.

General rules:

- During class, cell phones, tablets, and computers must be put away. Questions and feedback are always welcome.
- Presence at office hours is not compulsory, but recommended. Showing up by the dozen the day before the test is not efficient; please consider coming by when you have the first doubts. Plan ahead!
- Tests are designed to cover the material explained in class (**you** are expected to keep track of the topics presented.) If I never mentioned it in class, it's not going to be on the test (even if it's in the book.) In contrast, what I covered in class but is not in the book, *can* appear in the test.
- One goal of this course is to learn mathematical reasoning; to this end, test questions are *not* going to be an exact replica of the exercises discussed in the preparation.

With this, I wish you a lovely Spring semester here at The U!



Bruno Benedetti
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