

GEORGE MASON UNIVERSITY

Econ 831: Mathematical Economics II

Fall 2017

Professor César Martinelli
ICES-GMU
cmarti33@gmu.edu

A. Objective and description

This course develops the foundations of choice, price, and general equilibrium, as needed through out doctoral studies in economics, with some mathematical rigor. Topics include choice, preference and utility; consumer demand; competitive firms; externalities; and general equilibrium. The course emphasizes price taking behavior; a follow up course in the spring will emphasize strategic behavior.

B. References

The main references for the lectures are the textbooks *Microeconomic Theory* by Mas-Colell, Winston and Green, Oxford University Press, 1995, and *Microeconomic Foundations I: Choice and Competitive Markets* by David M. Kreps, Princeton University Press, 2012.

C. Syllabus

INDIVIDUAL CHOICE

1. Choice, preference and utility
2. Consumer demand
3. Aggregated demand
4. Production

midterm October 17, at class time

MARKETS

5. Competitive markets
6. Externalities and public goods
7. General equilibrium: normative theory
8. General equilibrium: positive theory

final exam December 19, at class time

D. Grading

Problems sets will be assigned every other week to be turned the week after. Students can skip turning one problem set without any further justification. Grading will come from the problem sets (20%), the midterm (35%) and the final exam (45%). If the grade in the final exam exceeds that in the midterm, the grade in the final exam will substitute for the midterm as well.

E. Office hours

I am available most Thursdays from 10 am to 1 pm in my office in Arlington; by appointment any day of the week.