SS 205B: FOUNDATIONS OF ECONOMICS

WINTER 2017

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Lectures: Mondays, Wednesdays and Fridays, 9-9:55am,
Course webpage: www.hss.caltech.edu/~fede/ss205/

TEXTS

“Microeconomic Theory” by Mas-Colell, Whinston & Green is the required
text for most of the material. For part of the course, Bewley’s “General
Equilibrium, Overlapping Generations and Optimal Growth Theory” may
be useful. Two other books you may find useful (for different reasons) are
Varian’s “Microeconomic Analysis,” and Debreu’s “Theory of Value.”

COURSE EVALUATION

There will be (roughly) bi-weekly homework assignments and a final exam.
I would like you to work in groups for the homework assignments, so form
groups of three or four students for the duration of the course. To make
the most of the course, I suggest that you work on the problems on your
own at first, then meet to discuss the problems with your groupmates. The
homework counts for 40% of the grade and the final for 60%.

SYLLABUS

1. GENERAL EQUILIBRIUM IN THE EDGEWORTH BOX. Walrasian equi-
librium and the welfare theorems. The core and the cooperative founda-
tion of walrasian equilibrium. Mas-Colell, Whinston & Green (MWG)
15.B. and 18.B.

2. EQUILIBRIUM AND OPTIMALITY. Private ownership economies. The
welfare theorems. The role of convexity of preferences and technolo-
gies. Aggregation and Welfare (Scitovsky contours and Samuelsonian
representative consumer). MWG Ch. 16; Bewley Ch. 3 and 5.

3. THE POSITIVE THEORY OF GENERAL EQUILIBRIUM - I. Existence
by the excess demand approach and the Negishi approach. Stability,
and uniqueness of Walrasian equilibrium. The Index Theorem. Determinacy. MWG Ch. 17, Bewley Ch. 4.


5. **Partial Equilibrium.** Welfare under quasilinear preferences. MWG Ch. 10 and 15.E; Bewley Ch. 8.

6. **Cooperative Foundations of Equilibrium.** Debreu-Scarf’s Core convergence Theorem in replica economies. Kim Border’s notes on Debreu-Scarf. (See also MWG Ch. 18.)
