1.1   Admin Info

Jean Guillaume Forand HH 131
Office Hours : Tuesday 3:30 5:00
Midterm 1 (Jan 31st) - 20 %
Midterm 2 - 20 %
Final - 50%
Assignments - 10 %

1.1.1   Topics

1. Consumer Choice

2. General Equilibrium

3. Welfare

4. Market Failure

    - Externality
    - Public goods

1.2   Consumer Choice

- Econ 201 with calculus

- basic model of economic theory

Economics is the study pf decision-making in social environments

- Classics : micro, macro

- Also : Family economics, economics of crime, etc

- Economists construct models : abstract representation

    - Build stylized version of reality (I.e market for cars)
    - Deduct logically necessary features of the model (I.e what determines the price of cars)
    - Test whether a models predictions are consistent with empirical evidence.

- Economic models are mathematical

1.2.1   A unifying model of decision-making

1. A decision-maker

2. Possible outcome DM may face

3. Actions available to DM, which affect outcomes.

4. Preferences of DM over outcomes, which describe the motivations

Using Mathematics

1. A decision-maker

2. A set X of outcome

3. a set of actions on feasible choices $B \subseteq X$

4. A function $u : X \to \mathbb{R}$, which assigns numbers $u(x)$ to each $x \in X$, interpreted as DM's utuility from x

1.2.1.1   Solution (Optimal Choice)

Choices by DM that lead to outcomes that best with her preferences Using mathematics, the optimal choice is $x^{\triangle} \in X$ which solves :
$$max u(x)_{x \in X} \text{ s.t } x \in B$$