

# *Notes for ECON 25100 - Microeconomics*

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These are lecture notes for spring 2024 ECON 25100 at Purdue. Modify, use, and distribute as you please.

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## *Course Introduction*

This course offers a comprehensive exploration of the principles that govern individual economic decision-making and the interactions within markets.

## *Introduction to Economic Principles*

Economics is the study of allocation of scarce resources to meet the unlimited human wants.

- Microeconomics: decision making by individual economic agents such as firms and consumers.
- Macroeconomics: aggregate performance of the entire economic system.
- Empirical economics: facts to present a description of economic activity.
- Economic theory: relies upon principles to analyze behavior of economic agents.

Economy has slowly transitioned from mainly theoretical to mainly empirical.

Assumptions are made consistently, so as to more rigorously create a methodology to analyze the world without overly complicating things.

Model building is the creation of abstractions from reality.

Occam's razor: The best model is that which describes reality and is the simplest.

"Ceteris Paribus": All other things equal. (changing only certain parameters and leaving everything else the same)

The lack of assumptions would make things either too simple or too complicated to viably describe reality.

Economics provides a method to make a rational choice.

Rigorous models are made to predict human behavior through either inductive logic, or deductive logic.

There are two kinds of economics:

- Positive Economics: concerned with reality.
- Normative economics: concerned with what should be. (If a statement has "should" it's probably normative).

The economic problem involves the allocation of resources among competing wants.

This exists due to scarcity.

Scarcity exists because of unlimited human wants and limited resources.

## Economic Resources

- Land - space, natural resources.

- Capital - physical assets like factories or tractors.
- Labor - skills, abilities, knowledge, etc.
- Entrepreneurial talent - the economic agent who creates the enterprise.
- Technology - a manner in which resources are combined to produce commodities (methods of making processes more efficient).

#### Core Principles of Economics:

- Cost-Benefit Principle: cost and benefits are the incentives. Do something if the benefits outweigh the costs. (Convert everything to money, and then calculate).

The cost-benefit principle is directly related to the willingness to pay, which is precisely, the conversion of benefits to money.

If the benefit is greater than the cost, one has achieved an economic surplus. This principle aims to maximize the economic surplus.

It also relates to framing effects, which is when a decision is affected by the method in which the situation or object is framed.

- Opportunity Cost Principle:

The cost-benefit principle is directly related to the willingness to pay, which is precisely, the conversion of benefits to money.

If the benefit is greater than the cost, one has achieved an economic surplus.