Introduction to Economics
When you were younger and learning about the concept of money from your parents, they probably gave you a dollar one day to buy what you wanted to purchase in a store. I used to help a friend out in the evenings at a convenience store in Cary, N.C. when I first started teaching at N.C. State. Young children would come into the store and go right to the candy counter. They clutched their four quarters tightly in their little hands, and would stare at that candy trying to figure out what they wanted and how much. Then it would start. “Mister, how much is this?” I would tell them, and they would put the candy back down. Then again, “Mister, how much is this?”. I would tell them, and they would put it back down. “Mister, how much is this?” This question and answer session would go on for several minutes until junior figured out what he/she wanted for their dollar. What were those youngin’s doing?

Well, they had a budget constraint, the four quarters in their little hands. They were trying to figure out the combination of candy that they could buy with their dollar that would give them the biggest belly ache they could get. Seriously, they were selecting the combination of economic goods they could buy, subject to their budget constraint, that would give them the most utility.

Do we do anything radically different now that we have all grown up? I don’t think so. Our budget constraints are larger and our “toys” and “candy” are more expensive; but the process we go through is basically the same.
Common Knowledge in our Economic System:

That all commodities have a price determined by a market (legal or illegal)

- Usually price is thought of as the monetary sacrifice that must be made to obtain a commodity

We usually think of price as the monetary sacrifice that we must make to obtain a commodity, but is it the “true cost” of obtaining that commodity?
The monetary price of a commodity may not be the full cost of obtaining the commodity. Let’s take a look at a few examples. Is bringing a bag lunch to school really cheaper than buying your lunch at school? On the surface, it may appear that a bag lunch would be cheaper, but upon closer examination, it might not be. You have to prepare your bag lunch which requires time either in the morning or the evening before you go to bed. You had to go to the store and purchase the components for your bag lunch. You may need a refrigerator to store some of those lunch components in. And, you will probably have to wash a utensil or two after preparing your bag lunch. All of these steps or processes requires your time. Now, you lug that bag lunch all over campus in the morning and have to remember not to leave it under your seat after class. Depending on the value that you place on your time, and the hassle of preparing and keeping up with your lunch, you may decide that buying your lunch at school is actually cheaper.

Living on campus versus commuting from off-campus, which is cheaper. If you live on campus, the need for a motor vehicle is practically non-existent. Your room rent on campus includes your utilities with the exception of your phone and perhaps cable TV. Choosing the meal plan means you don’t have to go to the grocery store, cook, or wash any dishes. If your roommate flunks out or quits school, your share of the rent remains the same when you live on campus. As a matter of fact, more students wanted to live on campus this year than in recent years past which caused quite a problem for many first year, Ag. Institute students this fall. Could lower cost be the reason?
What about eating out at a restaurant versus preparing and eating a meal at home? Let us assume that you are married with a couple of kids. You and your spouse both work. At the end of your work day, do you feel like preparing a meal? Cleaning up after that meal? How about spending your evening at the grocery store, or even one afternoon on the weekend at the grocery store. The kids want you to spend some time with them too.

Again, how much you value your time, and what you spend that time on; may make eating out cheaper for some folks than eating at home. If people did not place a high value on their time, many landscapers of the “mow, blow, and go” variety would be hard pressed to find some work. I never thought that I would consider paying someone to mow my grass. As responsibilities at work have increased, with the arrival of grandchildren, as well as a desire to maintain recreational interests that provide me with great satisfaction; there are more demands on my time. Now I am starting to consider that the two hours I spend mowing the lawn could be spent elsewhere, and provide me with more utility than the value of the money that I would sacrifice to pay someone to mow the lawn for me.
Remember:

**Microeconomics:** Micro theory (price theory) primarily studies the economic behavior of individual decision making units such as consumers, resource owners and business firms in a free enterprise economy. At times microeconomics will study economic behavior at the industry level.

**Macroeconomics:** Macro theory studies the aggregate level of economic activity, such as the economic systems total output, total level of unemployment, and the general price level for the economy as a whole.
Let's take this definition apart and analyze it.

Think of economics as being a core area, surrounded by outlying extensions into areas more usually associated with other disciplines.
The core area, economics, is considered a social science because it deals with human activity.
Because it Deals with Human Activity.

Economics deals with a limited range of human activity characterized by RATIONAL BEHAVIOR, and the interaction of individuals upon one another through the mechanism known as a

MARKET.
Rational Behavior:

An action well suited to achieve specific goals within the limitations and capacities of an individual.

You learn from your mistakes, and do not repeat them.
Limited Resources:

Resources are also called "factors of production" or "inputs."

- LIMITED implies the concept of SCARCITY
- For all practical purposes, human wants may be regarded as limitless. Do we ever have enough goods and services?
Scarcity

Scarcity simply means that there is not enough FOP's in the world to create all of the goods and services that people desire at a \( PRICE = 0 \).
Scarcity

The supply of resources available at any particular time, only allow for the production of a small fraction of the goods and services that people desire.
Resources, factors of production, inputs are all economic synonyms (having the same meaning).
Land and capital are often referred to jointly as “property resources.” Labor and entrepreneurship are often referred to collectively as “human resources” or “human capital.”
Nonrenewable resources would include oil, coal, natural gas, gold, silver, platinum, copper, etc. Renewable resources would include timber, water, grasslands, wildlife, etc.
A pickup truck used for business purposes would be considered capital. A pickup truck used to go to the beach for vacation is considered a durable consumer good.
Generally, the greater your physical and mental abilities are, the higher your earnings in the labor market.
A successful entrepreneur acquires land, labor, and capital in the appropriate proportions to produce a product or service in such a way as to earn a profit.
What does a entrep. do?

- Takes the initiative in combining land, labor, and capital in order to produce a good or service.

- Undertakes basic decision-making for the business.
What does a entrep. do?

- Takes risk of losing money or going bankrupt.

- Forms a business and introduces new products and techniques of production.
The payment land receives is referred to as rent. When you let someone else use land that you own, you receive rent. What about when you use land that you own to produce a commodity, do you incur any economic cost? Yes, you do. The cost is an opportunity cost. The next best alternative to using your land to produce a commodity, is to “rent” the land to someone else. If you were to grow a crop of corn on your land, and you calculated your return to be $35 per acre, but you could have rented that land to a neighbor for $40 per acre, did you really make a profit? I don’t think so. I think you lost $5 per acre. Just think about it. You could have rented that land out, popped a cold one, and relaxed the whole growing season with $40 per acre in your pocket. No hassles, no worries. This is just another way to look at the many ways to consider your alternative uses of resources that you control.

The return to capital is referred to as interest. Yes, interest. If you use $10,000 that you have saved to purchase a used backhoe and front-end loader, what have you given up the opportunity to earn on your $10,000? Yes, the interest you could have earned on that money had you left it in the bank. So before you purchase that backhoe and front-end loader, you better pencil your decision out to ensure that the backhoe and front-end loader will increase your profits by at least the rate of return that you could have earned on your money in the bank. This is why we call the return to capital, interest.
The payment labor receives for use in the production process is rather obvious. Labor receives wages, salaries, and commissions.

Entrepreneurship or management receives any residual amount left over after paying for the other factors of production. This residual amount, if any, is referred to as profit. Successful managers are rewarded with profits, unsuccessful managers end up with losses. If losses are too great, a manager will relinquish the resources that he has control of to be reallocated to managers that will use the resources efficiently and earn profits.
Limited resources have alternative uses

CHOICES must be made!!!

How will these scarce resources be used?
(1) Will we use oil to make gasoline, plastic, fertilizer etc.

(2) Use fertilizer to raise corn, soybeans, tobacco, cotton, turf, hostas, tulips etc.
What directs the use of resources to produce certain commodities? Does price allocate or steer resources in the direction that earns them the greatest return? I think so. If the price of beef cattle increases relative to the other uses of corn, then beef cattle producers will want to use more corn as they expand their herds. More corn will be allocated to beef cattle since the return to corn in beef cattle production will be higher than in alternative uses. Typically, beef cattle producers will bid the price of corn up until the corn market reaches a new equilibrium at a higher price. This higher price of corn may cause hog producers to cut back on hog production because of the higher price of corn, thus freeing corn supplies to beef cattle producers.

The power of prices to efficiently allocate resources and commodities never ceases to amaze me. And the fact that prices are determined by individuals interacting with each other in a market is truly remarkable.
What should we produce? Only those commodities for which consumers are willing to pay a price per unit sufficiently high enough to cover at least the full cost of producing them will be supplied by producers in the long run. The full cost of production includes all explicit (accounting) costs and implicit (opportunity) costs.

How much of each good or service should we produce? If consumers offer higher prices, consumers can normally induce producers to increase the quantity of a commodity that they will supply per unit of time. If consumers offer lower prices, consumers normally induce producers to decrease the quantity of a commodity that they will supply per unit of time.
ECONOMICS?

So far we have determined that economics is the study of the allocation of scarce resources to satisfy unlimited human wants.
Produce economic goods and services for present and future consumption

- Factors of production are used to produce things that people want.

- These "things" are known as commodities. Commodities consist of goods and services.
Economic goods always have a price associated with them. Price is a rationing mechanism used by our society to equate demand (consumption) and supply (production). Economic goods exist when the quantity of the good desired by consumers exceeds the quantity made available by producers when the price is equal to zero. People cannot have all of the good that they want at this zero price, so society must ration out what is available. Price increases above zero until an equality is reached between consumption and production.

A free good, on the other hand, is available in quantities in excess of what people desire at a zero price (free). Here the quantity available to consumers is greater than the quantity of the good desired by consumers at a price equal to zero.
Economic Goods

Tangible items in which the \textit{quantity demanded} by society exceeds the quantity available at a \textit{price equal to zero}.

\[ Q_d > Q_s \text{ @ } P = 0 \]
Durable consumer goods consist of items such as washing machines, dryers, clothing, toasters, microwaves, your personal vehicle, etc. that last three years or longer.

Non-durable consumer goods consist of items such as bread, milk, toothpaste, soft drinks, paper towels, etc. that last less than three years.
Remember, capital goods are one of the factors of production as well.
Free Goods

Tangible items in which the quantity available exceeds the quantity demanded at a price equal to zero.

\[ Q_d < Q_s \quad @ \quad P = 0 \]

Can you think of any free goods in our society today?
Services Are Intangibles Such as:

mowing, custom combining, education, tractor repair, income tax services, landscape planning, hair cuts, etc.
Production

The act of making goods and providing services.
Consumption

The act of using goods and services to satisfy needs and wants.
“Short run and long run are concepts that have particular meanings in economics, meanings that are often different from every day usage of the terms. In microeconomics, the short run is the time period in which one or more important conditions cannot be changed. A firm may make decisions “in the short run” because its building lease runs for another year or two, or because its workers have a three-year labor contract. Workers may make decisions in the short run because they have a fixed commitment, such as wanting to stay put until children finish high school. Thus, most of the firm’s workers may accept a pay cut in the short run, but once their fixed commitments are gone, the long run response may be different. For some firms or individuals the short run may be only a week or a month, while for others the short run may be years. The exact length of the short run depends on the length of the fixed commitments people face in a given situation.”

“The long run is the time period in which anything can be changed, or in which individuals and firms are fully able to respond to economic incentives and take advantage of economic opportunities. The long run has no specific time frame; it is simply the time period that is long enough to allow full response to changing incentives.”

This afternoon, let’s assume that you hear a radio broadcast indicating that Food Lion off of Avent Ferry road is having a special sale. Everything in the store will have a price = 0, or it is free. What will happen? Will it be a mad house? Will people go bonkers? How long will items remain on shelves? Will employees be able to stock the shelves as fast as people will be removing items from the shelves? Will trucks be able to bring commodities from the warehouse as fast as people will cart commodities out of the store. Will the shelves be bare in a very short time? Will fights break out as two people try and grab the last loaf of bread at the same time? Will normally peaceful, law abiding people turn into ?????

What will be left at the Food Lion for consumption tomorrow?

Prices ration consumption over time. They allow for the matching of consumption and production. Prices allow us to expect a ready supply of goods and services tomorrow. Prices help keep us peaceful and law abiding in our encounters with others. The power of prices is amazing.
SUMMARY

Three key words in our definition and discussion?

1. Scarcity
2. Choice
3. Time
Law of Scarcity

*Economic resources are scarce!*

- There are never enough at any given time to produce all the things that people want at a price = 0.

- Scarce resources can be increased, if at all, only through effort and sacrifice.
Choice

- Scarcity forces every economic system, every business, every individual to make choices.

- A decision to produce one commodity frequently implies a decision to produce less of another commodity (*production possibilities curve*).
Choice

- Often, the decision to produce a particular commodity may lead to the decision to completely stop production of another.

- In other words, some tradeoffs must be made since we do not have the resources to produce the variety and quantity of commodities we would like to produce.
Choice

PRICES assist us in determining which choices to make concerning:

- What to produce?
- How much to produce?
Time

Production requires time,
consumption requires time, choice
requires time, adjustments to price
changes or resource limitations
requires time.

Nothing about economics is
instantaneous !!!
Time

* There is always what we call a **LAG** in response to changes, or shocks to the economic system.

* One of the functions of PRICE is to ration out resources and commodities over time.
Think about that while you are taking a test. Or, while you are on vacation. How often have we wished for more time? Does time have a value? Can we put a price on time? Sure it does, and sure we can.

I never thought I would ever consider paying someone to mow my lawn, but over the last few years I have entertained the thought. It takes me about two hours (time) to mow my KY-31 tall fescue lawn. In the spring, my lawn may require two mowings per week. What could I be doing with that time? How much is my time worth? Well, I didn’t decide to hire someone to mow my lawn, but I did purchase a newer and larger garden tractor. My old mower was a 16 hp, gear box, Allis-Chalmers with a 48 inch mowing deck. My new mower is a 25 hp, hydrostatic drive, 54 inch cut, Scott’s (made by John Deere). The tighter turning radius on the new mower has virtually eliminated any hand trimming or push mowing (productivity gain), and I can have the lawn finished in one hour. I substituted a more productive, more expensive, modern machine for a less productive, older machine and cut my mowing labor and mowing time in half.

I paid a price though. That Scott’s was not cheap. But, I value my time more today than I did even 5 years ago. So, to me, the expensive machine was worth it.
CONCLUSIONS

- Economics is fundamentally concerned with choices or decisions concerning the use of resources (factors of production).

- Problems of choice arise when there are alternative ways of achieving a given objective.
I hope you saw the “economic method” at work in our discussion of time, and the personal example that I shared with you. How do the conclusions listed here relate to that mowing example? Read over the conclusions again, and the re-visit the mowing example.

How does the mowing example illustrate that economics is fundamentally concerned with choices or decisions concerning the use of resources (in this case capital and labor)?

How does the mowing example illustrate that problems of choice arise when there are alternative ways of achieving a given objective?

How does the mowing example illustrate that economics develops specific criteria which define the conditions for making the best use of an individual’s or society’s resources?

How does the mowing example illustrate that we employ the economic criteria as guide lines for formulating and evaluating decisions?