Unfinished Business

1. The Sellers supply rule derives from the benefit cost principle.
   a. A perfectly competitive market is a market where price is set by the forces of supply and demand so that every seller and every buyer takes price as given and beyond their control or influence.

   b. In a perfectly competitive market suppliers view the market price as the marginal benefit of production and sales of a unit of some good. For example, the marginal benefit to a restaurant of supplying a slice of pizza is the price of the slice. (In some cases, however, the supplier will calculate the marginal benefit to be larger than the price of the good in question because they believe that offering the good for sale will induce customers to buy other goods.)

   c. The marginal cost to a supplier of supplying a good is the cost of producing the good and selling it. In the short run, the marginal cost does not include the cost of the supplier’s fixed-in-place resources because it is not possible to reallocate those resources quickly.

   d. Marginal cost typically rise as suppliers increase production because they must allocate resources to production that have higher opportunity costs. For example, the employee with the comparative advantage in pizza making will be the first person you assign to the job. However, once that person is fully specialized in pizza making you must assign someone else, perhaps someone who is a better salad maker, to make additional pizza.

   e. The supplier will supply a good if price (marginal benefit) exceeds marginal cost and will supply up to quantity where marginal cost equals price.

   f. The example of Harry who can either wash dishes or recycle cans shows why Harry’s supply schedule for recycled cans is an upward sloping function of the price of a recycled can. Note that Harry takes that price as given and only allocates time to recycling if his marginal benefit from doing so exceeds his marginal cost (which in this case is the opportunity cost associated with his job as a dishwasher).

2. Examples that Illustrate the Importance of Price Elasticity of Demand
   a. Is the war on drugs justified by the belief that reducing the supply of drugs will reduce property crimes?

   b. Does it make sense to place a tax on sugary beverages in order to lessen childhood obesity?

New Material
Part Two of the Course focuses on micro economics, frequently referred to as “price theory.” The first topic we will consider is the connection between market equilibrium and economic efficiency. Later in this part of the course we will study so called “market failures” which are situations in which markets do not produce efficient outcomes.
1. Economies allocate goods (and services) to individuals. Economists call an allocation efficient if it is not possible to reallocate goods in a way that makes someone better off without making someone else worse off. If it is possible to reallocate goods to make at least one person better off while making no one worse off, then the original allocation is not efficient. This definition of efficiency is often called “Pareto optimality” for Vilfredo Pareto.

2. Provided that buyers and sellers are well informed price takers and provided that demand and supply schedules reflect all the benefits and costs associated with production and consumption of the good in question, a market allocation achieved by the equilibrium price is efficient.

   a. At market equilibrium, every potential consumer who is willing to pay the marginal cost of producing (and selling) the good is able to buy the good.

   b. At market equilibrium, every seller who is willing to produce and sell the good for a price that meets the reservation price of a willing buyer is able to produce and sell it.

   c. The equilibrium price simultaneously equals the marginal cost of producing the good and the marginal benefit of the good to the “last” person who buys it (when by last person I mean the person with the lowest reservation price).

3. How efficiency is affected by a price ceiling. Occasionally, the popular press includes suggestions that a ceiling should be imposed in certain circumstances. We next investigate the effect of a price ceiling for gasoline on market efficiency.

   ![US Gasoline Market Diagram]

   a. At a price below the equilibrium price (such as a price ceiling), it is possible to find trades that make some agents better off without making any worse off.
b. At a price above the equilibrium price (such as a price floor), it is possible to find trades that make some agents better off without making any worse off. This is also true if government operates a price support program that purchases the surplus product associated with the price support.

c. If there is an effective price floor or ceiling, then total surplus is less than total surplus at the equilibrium price.

4. A first-come, first-served policy for bumping air travelers from over-booked flights is not efficient. A program that asks for volunteers is efficient.

5. Markets are efficient when the value placed by a buyer on the last unit produced of a good or service equals the marginal cost of producing that unit.

a. Why marginal cost pricing of water by a municipality is efficient and average cost pricing is not.

b. In Charlotte, citizens can get their electric power from two sources: a hydroelectric generator and a coal-fired steam generator. The hydroelectric generator can supply up to 100 units of power per day at a constant marginal cost of 1 cent per unit. The steam generator can supply any additional units that are demanded at a constant marginal cost of 10 cents per unit. When electricity costs 10 cents per unit, residents of Charlotte demand 200 units per day.

(1) How much should the city charge for electric power?

(2) Should it charge the same price for a family whose power comes from the hydroelectric generator as it does for a family whose power comes from the steam generator?

c. 2007, the Triangle area suffered one of the worst droughts on record. In response, the water authority in Durham considered changing the formula used to charge customers for water. Before the drought, Durham charged a flat rate of $1.56 per hundred cubic feet of water no matter how much water a customer used. Which of the following new rate schedules would create the strongest incentive for Durham customers to find substitutes for low benefit uses of water?

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<tr>
<th>Alternative Rate Schedules</th>
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<tr>
<td><strong>One hundred cubic feet of water per month</strong></td>
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<td><strong>Answer Option</strong></td>
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6. Is the UNC basketball ticket distribution is economically efficient, fair to all students, and consistent with the mission of UNC-CH?
   a. The standard we use for efficiency is Pareto optimality. An allocation is not efficient if it is possible to make someone better off without making someone else worse off.
   b. The standard we use for “fair” is equal treatment of all students.
   c. The standard we use for “consistent with UNC’s mission” is whether the ticket distribution system creates incentives that are contrary to the educational mission of UNC.

2011-2012 Men’s Basketball Ticket Policy

- The following ticket policy applies only to the Wisconsin game on November 30th and all home games on or after January 7th, excluding the DOOK game. All other home games will NOT be ticketed through the student lottery and rather treated as "break" games. Students seeking to attend these "break" games should take their one card to the UNC Ticket Office (located adjacent to the basketball hall of fame) on the day of the game to receive a general admission ticket to the student section.
- Student lottery winners will receive two (2) general admission tickets within the student section.
- Three (3) phases
  - Phase 1 (1.5 hours prior to tip-off), Phase 2 (1 hour prior to tip-off), Phase 3 (30 minutes prior to tip-off)
- Students will register online for each game individually
- Students will register for games ten (10) days prior
- Lottery notification emails will be sent out five (5) to seven (7) days prior to the home game
- A link on the notification emails will allow students to return their tickets by logging into their account
- Notification emails will be reconfigured in order to increase clarity
- The CAA will maintain a listserv the whole season specifically for basketball lottery information and send out reminder emails to students
- There will be different incentives for every home game for students that turn back tickets as well as those who go to the stand-by line
- The CAA will publicize the policy during the summer at the CTOPS/TSOPS sessions to all the incoming students
- Students can follow the Ticket Office's Twitter to get reminders about sign ups, deadlines, available seating, etc. @UNCStudentTix
- The CAA will run a publicity campaign during the Fall semester to increase student awareness on the ticket policy and promote the Turn-it-Back and Stand-By Line systems

http://www.unc.edu/caa/ticket_policy.php