Price Discrimination

Monopoly:
- Single Price: One price to all customers. Reduces output below competitive level. Captures limited area under demand curve. Leaves money on the table represented by the dead-weight welfare triangle.
- Price discrimination is an attempt by the monopolist to convert more consumer surplus into profit. Attacks the dead-weight triangle and the remains consumer surplus.

Perfect price discrimination — 1st Degree
- Captures all consumer surplus of all consumers. Gets the entire area under the demand curve above marginal cost. (Consider both constant and increase marginal cost.)
- Output is identical to competition.
- There is no dead-weight welfare loss, though there is a substantial income transfer from consumers to the monopolist.

How can the monopolist achieve this?
- Of course the monopolist must prevent the entry of competitors, just as in the single price case.
- Moreover, in 1st degree p/d the monopolist must be able to:
- Distinguish the demand intensity of different consumers.
- Prevent resale between consumers.
- Examples of 1st degree p/d: Mafia protection rings; divorce lawyers; ???

P/d when the monopolist is unable to perfectly distinguish consumers and prevent resale:
- 2nd Degree: Block pricing; two-tier pricing
- 3rd Degree: Market separating
- Combo's

Examples:
From Patents and Copyrights:
- Books: Hard back/paperback — could call this either 2nd or 3rd
- Movies: First run theaters, second-run, Astro, movie store, HBO, broadcast TV
- Drugs: Priced differently in different countries ???
- Inventions: IBM card case.
From Brand Names and Trademarks:
- Disney Land: Entry fee and then prices per ride (changed with Disney World—why?)
From Clubs:
- Country Club Pricing: members v. non-members

P/d in the Face of Competitive Entry
- Lumpiness in production
- Like public goods
- Question from comp:

The following story was recently reported in the news: "Senator John Kerry confirmed late Monday that he's been visiting Washington's famed Cristophe Salon for haircuts, where he has been paying $75 a visit -- half of what Senator Hillary Clinton was charged for a similar shampoo, cut, blow and go!" Similar complaints have surfaced in the past by women's groups about the pricing of dry cleaning costing women more than men for what appears to be similar items. Analyze gender pricing of hair styling and dry cleaning. Specifically,
a)   Why are men and women charged different prices?
b)   How is it that men and women can be charged different prices?
c)   What types of market structure(s) might lead to this situation?
d)   Suppose a law is passed requiring equal gender pricing. What sorts of impacts do you expect to happen?

Notes on Golf Course Pricing

The question is how does the fixed fee pricing affect consumption of golf by students and why would the Walker course do this. The facts are that students can pay one fee of $250 per semester and play an unlimited amount without paying further green fees. The a la carte pricing is $25 on weekends and $15 on weekdays. For simplicity, I will assume this averages to $21 based on available time to play. (Carts are extra, but would be regardless.)

In the graph below I have depicted two different demand curves. These represent the demands of two different students. Let's call the student with the less intense demand (the interior demand curve) Player 1 and the other Player 2.

Both players have the same choke price; that is, at a green fee of $42, they will play no golf. At the average price paid each time they play, Player 1 will play 7 times per semester while player 2 will play 10 times. At zero marginal price Player 1 will consume 14 rounds of golf in the semester, while Player 2 will go out 21 times.

Given a la carte pricing, both players enjoy the consumer surplus associated with the area above $21 and below their respective demand curves. Since a la carte pricing is always an option, they will always enjoy this. The question is, how much surplus is under their respective demand curves to the right of the quantity that they consume under a la carte pricing.

Player 1 spends $147 per semester with a la carte pricing; that is, $21 times 7 rounds. At a marginal price of zero, Player 1 would consume 7 additional rounds. The consumer surplus of these additional rounds would be $73.50. The calculation is the area of the triangle $21 high and 7 units wide. From this we see that Player 1 will not pay the flat fee of $250. It isn't worth it. The sum of what he spends on a per round basis plus the additional consumer surplus of 'all you can eat' pricing un the flat fee is only $220.50.

Next let's do the same calculation for Player 2. He spends $210 and plays 10 rounds if he pays by the round. However, if he pays the flat fee of $250 for 'all you can eat' he will play an additional 11 time. The consumer surplus of this is the area of the triangle $21 high and 11 wide or $115.50. Thus the sum of his expenditures on a per round basis plus the area under the demand from 10 to 21 units is $325.50. By paying the flat fee, Player 2 enjoys a net increase in consumer surplus of $75.50.

So, now we have an idea of who will and who will not pay the flat fee. The next question is, Why would the golf course managers price like this? In broad-brush terms, the answer is that if the flat fee is set optimally, the golf course has nothing to lose and will gain some revenues. The trick is to set the flat fee high enough so that no one or maybe only a few people are spending that much on an a la carte basis. (A la carte, it would take 12 rounds per semester to equal $250.) The course would lose money at the margin if it allowed people who were already spending more than $250 to play all they want at $250. However, for people like Player 2, who do not spend $250, the course enjoys a net increase in revenue (in this example, $40).