

Topics in Industrial Organization Theory

A 10 hour graduate course by Mark Armstrong

The topics covered are:

Consumer demand

Single-product and multi-product demand systems
Connections between net consumer surplus and gross utility
Complementary and substitute products
Discrete choice framework
Sequential search

Armstrong (2017), “Ordered consumer search”. *Journal of the European Economic Review* [section 2]
Weitzman (1979), “Optimal search for the best alternative”, *Econometrica*.

Monopoly

Single-product pricing and the inverse-elasticity rule
Cost-passthrough and other comparative statics
Multi-product linear pricing, with substitutes and complements
Linear demand and homothetic demand
When is a two-part tariff more profitable than linear pricing?
How stochastic schemes can be profitable with multiple products
Third-degree price discrimination
Nonlinear pricing, product-line pricing, and the “demand profile” approach
Multi-product bundling
In-store obfuscation

Armstrong (2016), “Nonlinear pricing”, *Annual Reviews of Economics* [sections 2 and 3].
Armstrong (2017), “Ordered consumer search”. *Journal of the European Economic Review* [section 4.1]
Armstrong & Vickers (2017), “Multiproduct pricing made simple”, *Journal of Political Economy* [forthcoming].
Johnson & Myatt (2003), “Multiproduct quality competition”, *American Economic Review*.
Varian (1985), “Price discrimination and social welfare”, *American Economic Review*.
Wilson (1993), *Nonlinear pricing*, OUP.

Oligopoly

Bertrand and Cournot oligopoly with differentiated products
Competitive price discrimination and “add-on” pricing
Models with price dispersion and random pricing:
 heterogeneous consumer awareness
 capacity constraints
Non-sequential consumer search
Sequential consumer search:
 homogeneous products and product differentiation
 random and ordered consumer search

- Armstrong (2006), “Recent developments in the economics of price discrimination”, in *Advances in Economics and Econometrics: 9th World Congress of the Econometric Society* [section 3]
- Armstrong (2015), “Search and ripoff externalities”, *Review of Industrial Organization*
- Armstrong (2016), “Nonlinear pricing”, *Annual Reviews of Economics* [section 4].
- Armstrong (2017), “Ordered consumer search”. *Journal of the European Economic Review* [section 3]
- Armstrong, Vickers & Zhou (2009), “Consumer protection and the incentive to become informed”, *Journal of the European Economic Association*.
- Burdett & Judd (1983), “Equilibrium price dispersion”, *Econometrica*.
- Butters (1977), “Equilibrium distributions of sales and advertising prices”, *Review of Economic Studies*.
- Diamond (1971), “A model of price adjustment”, *Journal of Economic Theory*.
- Gabaix & Laibson (2006), “Shrouded attributes...”, *Quarterly Journal of Economics*
- Ireland (1993), “The provision of information in a Bertrand oligopoly”, *Journal of Industrial Economics*.
- Prescott (1975), “Efficiency of the natural rate”, *Journal of Political Economy* [pp. 1232-3]
- Singh & Vives (1984), “Price and quantity competition in differentiated duopoly”, *RAND Journal*.
- Stahl (1989), “Oligopolistic pricing with sequential consumer search”, *American Economic Review*.
- Varian (1980), “A model of sales”, *American Economic Review*.
- Wolinsky (1986), “True monopolistic competition as a result of imperfect information”, *Quarterly Journal of Economics*.

The course will be graded by a take-home problem set at the end of the course.