AEM 6700 - Economics of Consumer Demand
Fall semester, 2016

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Times and Place: Monday and Wednesday 8:40am – 9:55am
Warren Hall B02.

Office hours: Wednesdays 2:00pm – 4:00pm

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(Office hours to be defined)

Course Objectives: This course is designed primarily for graduate students in applied economics and other students interested in gaining knowledge on the economics of consumer demand and its applications. It is a course based in economic theory and its empirical applications focusing on consumer demand. We will study the core of consumer theory and essential mathematical economics to understand how researchers, private businesses and policymakers use models of consumer behavior and demand response to support decision-making. We will spend considerable time identifying relevant consumer demand related problems/issues; analyzing how economic theory can help us shed light on these problems/issues; employing basic quantitative models to understand how to use data to understand consumer demand and behavior; and discussing how theory and empirical models can support decision-making. We will examine the relevance of demand models in the areas of public policy, development economics, marketing/management, and environmental economics. Exposure to a wide variety of publications in this area, and the term project assignment, will provide you with the opportunity to develop your analytical skills and perhaps produce an article of publishable quality.

The objectives of this course are to:

1. Develop an understanding of the theories and the types of data available analyze consumer demand.
2. Familiarize with a variety of applied models that address fundamental problems in consumer demand.
3. Gain experience in framing, solving, and communicating solutions to demand economics problems.
4. Prepare the student for advanced courses in microeconomics.

Dynamics of the Course: each topic will be introduced with a practical problem before going into the theory and methods that can help frame it. You will work on these problems in small groups as an in-class activity. Next we will discuss the different approaches used by groups to shed light of the problem. Subsequently, we will study the theories and the empirical models that
can help us understand the problem. Therefore, in the sessions with an in-class activity, it is important that at least one member of the group has a laptop.

In addition, journal articles will be assigned on a weekly basis, and a student will be the discussion leader in class on each reading assignment. There will be 2-3 problem sets during the semester. The problem sets are intended to strengthen the concepts discussed in class and prepare students for the exams.

Students will be introduced to several basic statistical methods to analyze demand. Recognizing that not all students have experience using statistical software, training opportunities will be offered to learn the basics of STATA. However, students are free to use any statistical software they are familiar and comfortable with.

Participation in in-class activities, contribution to discussion of journal articles, completion of problem sets and class attendance, all influence the class participation grade (see below).

**Course Grade:** The final grade for this course will consist of four parts. There will be two exams, a midterm (30%) and a final exam (30%). In addition, a course project (25%) is required. Finally, several group assignments, class participation and attendance will count 15%. In this course, active participation is very important through discussion of journal articles, general discussion of issues, etc. Included in class participation will be several group take-home assignments requiring a group oral presentation in class. So while formal attendance will not be taken, it will count against you in your class participation if you repeatedly miss class. The course project will be a term paper on some subject in economics of consumer demand picked by you with the approval of the instructor. If one is interested in an area of economics of demand for thesis research, it might be useful choose a topic for the course project that is complementary to the thesis, e.g., a literature review, a smaller scaled model, or some other aspect of the thesis research.

**Textbooks:** There is no textbook for this class, but there are required readings on reserve and in Blackboard. In addition, a copy of my lecture notes will be available in Blackboard too. The link to blackboard is: [https://blackboard.cornell.edu](https://blackboard.cornell.edu). Recommended reference books that have excellent economic intuition for the study of the economics of demand are:

Content:

I. The Theory of Demand for Goods and Services (Weeks 1-3)
   • Motivation: Demand for Blueberries
   • Preferences
   • Constraints
   • Consumer Optimization
     (1) Assumptions
     (2) Lagrangian (Direct) Method
     (3) Examples
     (4) Theoretical Restrictions on Systems of Demand Equations
   • Duality and The Envelope Theorem
     (1) General Concept
     (2) Application I: Indirect Utility
     (3) Application II: Expenditure Function
     (4) Roy’s Theorem
     (5) Shephard’s Lemma


II. Application of Consumer Demand Systems (Weeks 4-5)
   • Motivation: Demand for Meats
   • Consumer behavior: from theory to empirical application
   • Data for estimating demand models
   • Continuous demand systems: AIDS and Rotterdam
   • Estimating demand systems; endogeneity and instrumental variables estimation
   • Data organization and variable choice
   • Estimating an AIDS model: example
   • Estimating a Rotterdam model: example


III. Introduction to Discrete Choice Theory and Random Utility Models (Weeks 6-7)
   • Motivation: “Demand for paper towels”
   • Random utility concept
   • Simple logit model
   • Nested logit model
   • Mixed logit model and extensions
   • Estimating a discrete choice models: Examples

Readings: Train (2009) Chapters 1-4; Gracia and de Magistris (2008); Anderson and de Palma (1992); Berry (1994); Richards, Patterson and Tegene (2007).
IV. Experimental Economics Methods and Consumer Demand (Week 8)
- Motivation: “Deciding how and where to grow lettuce”
- Basic Concepts in Experimental Economics
- Example: “Developing a Broccoli Industry in the East Cost”
- Links to environmental economics: “Demand for Environmentally and Socially-Responsible Labels”

**Readings:** Davis and Holt (1993) Chapter 1; Verteramo et al. (2016); Fan et al. (2016).

V. Other topics in applied demand models (Weeks 9-13)
- Eliciting consumer utility in the development of new products: Conjoint Analysis
  **Readings:** Malhotra (2010) Chapter 21; Rao (2014) Chapter 1

- Customer satisfaction and demand in retailing: Factor Analysis and Multivariate statistical methods
  **Readings:** Malhotra (2010) Chapter 19; Gómez et al. (2004); Gómez and Shapiro (2014).

  Price promotions and consumer response: Using scanner retail data to study demand
  **Readings:** Pauwels et al. (2002).

- Demand models in development economics: Income Elasticity of Demand
  **Readings:** Attanasio et al. (2011); Behrman, and Deolalikar (1987).

- Forecasting demand using univariate time series analysis

**Supplementary Reading List**


