

ECON 474

Economic Consulting and Applied Managerial Economics

Spring 2016

Jeffery Dubin – jdubin@usc.edu

Office Hours: One hour before lecture and by appointment

TA: Xing Zhang – xingzhan@usc.edu

Office Hours: TBD

Grader: Steven Weier – sweier@usc.edu

Office Hours: TBD for 1 or 2 sessions after the midterm

Course Description:

This is an undergraduate level special topics course that introduces economic consulting and managerial economic methods applied in real world problems. We use economic methods to analyze issues of intellectual property, environmental damage, trademark infringement, brand value, and consumer demand. Economic principals such as elasticity, demand curves and monopolies will be discussed using an applied econometric approach. During the second half of the course marketing models such as logit and the Bass Model will be analyzed and discussed in comparison to economic models. The analysis will focus on econometric thinking and problem solving using case studies as the basis for the lectures and homework. Lectures will focus both on the quantitative approach used by economic consultants as well as the intuitive thought process and rationale that drives that quantitative analysis. The problems and cases analyzed are typical of those found in the economic consulting environment. Prior background in econometrics is not required although helpful. A goal of the course is to provide insight into problem formulation, data gathering, and the implications of statistical models for real world decision-making. Students are exposed to the methods of marketing based on data analysis.

Professor Jeffrey Dubin teaches this course. Dr. Dubin earned his undergraduate degree in Economics with highest honors and great distinction from the University of California, Berkeley, and received a Ph.D. in Economics from the Massachusetts Institute of Technology. Dr. Dubin is presently Adjunct Professor of Economics, Statistics, and the Practice Area at USC. He was previously Adjunct Professor of Economics and Statistics in Global Economy and Management at the UCLA Anderson School of Management. Dr. Dubin retired from the California Institute of Technology in 2007 where he was a tenured Professor of Economics. Dr. Dubin joined Caltech in 1982.

Dr. Dubin's research focuses on microeconomic modeling with particular emphasis in applied econometrics. His current research concerns discrete choice econometrics, energy economics, and tax compliance. Dr. Dubin is also co-founding member and Director of Statistical and Economic Analysis at Pacific Economics Group in Pasadena. He is also Senior Advisor with Cornerstone Research LLP. Dr. Dubin frequently provides expert testimony.

Main Text:

Studies in Consumer Demand – Econometric Methods Applied to Market Data. (1998) Jeffrey Dubin ISBN: 0-7923-825-3 (“SCD”)

Recommended Texts:

Academic journal articles, legal cases, expert testimony, and excerpts from additional books will be assigned throughout the course for critical analysis and discussion and will be available on Blackboard.

Assessment:*Core Grade*

Homework problems based on the current cases being discussed will be assigned on a roughly weekly basis. There are typically 8-10 homework assignments during the semester. A course project (TBD), to be worked on collaboratively by the class as whole (but in assigned groups of 5-7 students) will be assigned. The course project involves original research and data collection with data analysis and a class presentation. The core course grade is determined by homework (25%), class project (25%), midterm examination (25%), and final examination (25%).

Participation

The top 10% or so of students that participate in class will typically receive a 1/3 letter grade boost to their core course grade (e.g. a boost from a B+ to an A-). The award of the core grade boost remains at the complete discretion of the Professor. Participation in class is defined roughly as asking and answering questions and taking an active role in a manner that raises the educational experience for the entire class. Participation is not the same as attendance.

Note: the assessment of participation is somewhat subjective and is completely at the discretion of the instructor. Attendance is not mandatory (except for presentation days and examination days). However, lack of attendance is likely to be very highly correlated to poor performance in this course given the lecture style in this course. Also Professor Dubin does not provide “make-up” lecture notes. If you plan to miss class, let the Professor know in advance and plan to get notes from a friend. A reasonable objective for all students is to get the Professor to recall your name by mid-semester. Professor Dubin encourages students to meet with him outside of the classroom.)

Extra Credit

“Extra credit” may be awarded during the semester. For instance, homework extra credit may be available from time to time. Homework extra credit might allow a student to compensate for lost points from another assignment or from a missing homework. Homework extra credit, whether it is offered or how much weight it receives in the overall homework component grade, remains at the discretion of the Professor and is subject to revision or adjustment during the semester as deemed appropriate by the Professor. Homework extra credit will not allow even the most eager student to achieve more than 100% on the homework grade component. The value of homework extra credit is limited and should not be expected to be a perfect substitute for performance on the core homework assignment.

Any extra credit, whether it is offered or how much weight it receives in the final course grade, remains at the discretion of the Professor and is subject to revision and adjustment as deemed

appropriate by the Professor. The purpose of extra credit, in this course, is to provide extra work for some students to achieve a mastery or proficiency in the material that goes beyond the course requirements. You should not and cannot rely on extra credit to compensate for poor achievement in the core component grading.

Importantly, it is not necessary to do any extra credit to get an A in this course. Doing A level work on each core component (homework, midterm, project, final) would be sufficient to get an A in the course. Extra credit is purely optional. Consequently, you will do no worse in this course than your core component grades reflect.

Questions about Grading

You may track your progress on Blackboard and discuss grading issues with the TA. It is your responsibility to discuss posted grades within one week of their posting. They are otherwise final.

Academic Integrity Policy:

The Department of Economics is committed to upholding the University's Academic Integrity code as detailed in the SCampus Guide. It is the policy of the department to report all violations of the code. Any serious violation or pattern of violations of the Academic Integrity Code will result in the student's expulsion from the major or minor, or from the graduate program.

Note on Academic Integrity as it Relates to this Course:

Students are expected to do their own work for homework assignments. It *is* appropriate to collaborate with classmates, but it is *not* appropriate for students to turn in identical assignments or joint assignments.

Academic Accommodations

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early as possible in the semester. DSP is located in STU 301, and is open 8.30am-5.00pm, Monday through Friday. The phone number for DSP is (213)-740-0776.

Optional Readings

Readings labeled as "optional" are 100% optional. They are included for students that are interested in delving deeper into the topics than time permits in this course. The optional readings are largely geared towards a more advanced audience, such as MA or PhD students. The optional readings will *not* help you to do better on the exams or homework assignments. They are purely there for students seeking more advanced understanding of the material.

Course Schedule and Topics

The course is largely organized into various case studies, each of which emphasizes different topics, skills, and methodological tools. The readings listed below match file names on Blackboard. On Blackboard, the files are all organized into their respective case study folders.

Schedule and Due Dates for Spring 2016

Wk	#	Date	HW Due	Description	Readings
Unit 1: Canada Post + Prescott Case Studies					
1	1	1/12		Syllabus, course reviews, past and current cases, introduce Prescott Event Center case and discuss Problem Set 1 (a.k.a. PS1a) (Homework 1)	Canada Post (Required) – Canada Post; Chapter 1.pdf [see textbook for physical copy] – McDevitt; Newsweek; To Postal Workers, No Mail is Junk.pdf – Dubin; Handwritten Regression Notes.pdf – **Fisher; Multiple Regression in Legal Proceedings.pdf [Especially important to read if you haven't taken econometrics] Canada Post Skim/Optional – Dubin Ch3; Demand for Direct Mail.pdf (skim) – Project Objectives.pdf (skim) – Wallis Seasonal Variation.pdf (optional) – Malinvaud Demand Theory.pdf (optional) Prescott – Cohen ERA Report.pdf – Dubin Expert Witness Report.doc – Rhoda Report.pdf – Dubin Affidavit 1;doc – Dubin Affidavit 2; Responses to Rhoda.doc Prescott (Optional) – ERA Draft Report.pdf
	2	<u>1/14</u>	<u>PS1a</u>	Prescott & Canada Post: Critique Rhoda; Introduction to Canada Post Case; Demand Theory, Elasticity, Theory and Measurement Issues; Elasticity Problem to do at home	
2	3	1/19		Canada Post & Prescott: Dubin's methodology in Prescott explained; Linear regression model and constant elasticity regression model; demand for ad mail; Canada post methodology; basics of econometric demand analysis	Prescott (Optional) – ERA Draft Report.pdf
	4	<u>1/21</u>	<u>PS1b</u>	Canada Post: Trends, creating seasonal variables, and multi-product monopolist	
3	5	1/26		Canada Post: Multiplier concept, ex-ante and ex-post forecasting, Lerner's Rule, marginal cost and revenue, and Ramsey Pricing	
	6	<u>1/28</u>	<u>PS2</u>	Hedonic Pricing; Multivariate regression; R-squared, Excel/Stata, seasonal variables with -1, 0, and 1	

Wk	#	Date	HW Due	Description	Readings
Unit 2: Bali Ritz Carlton v Bulgari Case Study					
4	7	2/2		Bali: Introduction to Bali Case	Bali (Required) – Dubin Expert Report.pdf (required) – Owsley Expert Report.pdf (required) – Bali.ppt or Bali.pdf (look at) Bali (Optional) – Owsley Scenarios; Bali Case.pdf (optional)
	8	<u>2/4</u>	<u>PS3</u>	Bali: Owsley estimates, market share, dilution rate, Dubin’s mistakes, key variables affecting RC Villa Revenues	
5	9	2/9		Bali: Owsley’s errors; Bali Conclusion	–Dubin; Supplemental Expert Report for Bali Case.pdf (optional)
	10	<u>2/11</u>	<u>PS4</u>	Math; Ordinary least squares	
Midterm					
6	11	2/16		Midterm Review	Midterm (Recommended) – Sample Midterm.pdf (recommended) –Sample Midterm Solutions.pdf (recommended)
	12	2/18		MIDTERM	
Unit 3: Mabuchi Micro Motors, Patents/Trademarks, + Price Sensitivity					
7	13	2/23		Mabuchi: Intro to Mabuchi; Patents, and Demand Supply Systems	Mabuchi + Patents (Required) – Dubin SCD Chapter 2: The World Demand for Fractional Horse Power Direct-Current Motors (textbook) (required) – DeFranco; Patent Infringement Damages.doc (required) – Marston; Pricing to Market in Japanese Manufacturing.pdf (required) – Panduit; Court Opinion.pdf (required) – High Fructose Corn Syrup v Sugar.ppt (look at) Mabuchi + Patents (Skim) – Campa and Goldberg; Exchange Rate and Pass-through into Import Prices.pdf (skim) – Dubin SCD Chapter 3: Estimation and Identification of the Worldwide Demand for Acetic Acid (textbook) (skim) Price Sensitivity (Required) – Granger and Gabor; On the Price Consciousness of Consumers.pdf (required) (necessary for PS5) – Granger and Gabor; Price as an Indicator of Quality.pdf (required) (necessary for PS5) – Lewis; Price Sensitivity Measurement.pdf (required) (necessary for PS5)
	14	<u>2/25</u>	<u>PS5</u>	Mabuchi continued, 4 elements of Panduit; price to market theory; Marston; foreign prices and exchange rates; trademarks; HFCS	

Wk	#	Date	HW Due	Description	Readings
Unit 4: Nestle/Carnation Case Study + Brand Value Estimation + Cal Tech Case Study					
8	15	3/1		Nestle/Carnation: Intro to Nestle/Carnation; Methods of determining values of brands/trademarks; multinomial logit; endogeneity; cumulative distribution function; introduce Dubin's Equity	Nestle/Carnation + Brand Value Estimation (Required) – Dubin SCD Chapter 4: The Demand for Branded and Unbranded Products: An Econometric Method for Valuing Intangible Assets (<u>in textbook only; no pdf</u>) – Demand for Branded and Unbranded Products.pdf – Harlan; Rental America, Washington Post Article.doc (required)
	16	3/3		Nestle/Carnation: Dubin's Equity; Introduce Group Project and form groups	Nestle/Carnation + Brand Value Estimation (Skim) – Dubin et al.; LA Electric Vehicle Strategic Market Study.pdf (skim)
9	17	3/8	PS6 <u>Groups for Group Projects</u>	Linear probability model; CDF, Normal CDF; Random Utility Maximization; Groups for Group Projects Due (have 1 person e-mail list of first and last names of group members to Steven and Xing and CC all group members)	
	18	3/10		Review Random Utility Maximization Introduce Cal Tech; People not in groups assigned to groups for group project	
10	19	3/15		SPRING BREAK – NO CLASS	
	20	3/17		SPRING BREAK – NO CLASS	
11	21	3/22		Stata – How to Use for Group Project	
	22	3/24		Cal Tech Admissions; production theory and Bass Model	Cal Tech (Required) – Dubin; Cal Tech Admissions Table 3-11.pdf (Required) (PS7) Cal Tech (Skim) Dubin; Report on Freshmen Admissions at Cal Tech.pdf (skim)

Wk	#	Date	HW Due	Description	Readings
Unit 5: Kodak/Polaroid Case Studies					
12	23	<u>3/29</u>	<u>PS7</u>	Kodak and Polaroid Introduction	Kodak/Polaroid Required) – Dubin SCD Chapter 7: The Demand for Cameras by Consumers - A Model of Purchase Type Choice and Brand Choice (<u>textbook</u>) – Bass; New Product Growth for Model Consumer Durables.pdf – Baumol; Five Camera-Demand Models.pdf – Hauser; Note on Life Cycle Diffusion Models.pdf – Logic of Fisher Demand Analysis; start on page 13.pdf Kodak/Polaroid (Skim) – Analysis of Sales of Integral Cameras, Kodak and Polaroid.pdf – Exhibits.pdf – Kodak Market Expansion.pdf – Polaroid Conditional Demand for Film.pdf – Sources of Integral Instant Cameras' Rise and Fall.pdf – Summary of Kodak Market Expansion Effect and Other Exhibits.pdf
	24	<u>3/31</u>	<u>Project Description</u>	Kodak and Polaroid Continued	
13	25	4/5		In-class Project Help and Work Day	
	26	4/7		Finish Kodak; Baumol Model; value of features translated into prices; non-use values; travel cost as valuation method for nature	
Unit 6: Garcia Personal Injury Case Study + Fishing					
14	27	<u>4/12</u>	<u>PS8</u>	Garcia Personal Injury Case + Fishing	Garcia + Fishing (Required) – Dubin Expert Witness Report on Garcia Case.pdf – Garcia Settles Lawsuit.pdf – Kings Settle Garcia Lawsuit.pdf – Garcia Exhibits.pdf – Dubin SCD Chapter 5: The Demand for Recreational Fishing in Montana (<u>textbook</u>)
	28	4/14		Garcia Personal Injury Case + Fishing	
Unit 7: Sampling + Presentations + Final Review					
15	29	<u>4/19</u>	<u>Optional PS9</u>	Sampling	Sampling (Skim) – Cochran; Ch2 Simple Random Sampling
	30	4/21		Presentations	
16	31	4/26		Presentations	
	32	4/28		Presentations and/or Final Review	

Review Session(s) for Final led by Xing and/or Steven
Date, time, and location TBD

FINAL

12-1:50pm section: Wednesday, May 11, from 2-4pm

2-3:50pm section: Thursday, May 5, from 2-4pm