## INTRODUCTORY ECONOMETRICS

## Universidad Carlos III de Madrid

## Master in Economic Development and Growth

## Course Outline

Session	Detail	$\mathrm{Date}/\mathrm{PS}/\mathrm{Quiz}$
1	${\bf Introduction}$	
	Simple Linear Regression: Definitions,	
2	OLS	
3	Simple Linear Regression: Goodness of Fit,	
	Algebraic properties of OLS and Expected Value	Problem Set 1
4	Simple Linear Regression: Variance of OLS,	
	Functional Form and Inference	
5	Multiple Linear Regression: Motivation, Interpretation	
	of OLS estimates, Assumptions, Expected Value of OLS estimators	Problem Set 2
6	Multiple Linear Regression: Omitted Variable Bias,	
	Variance of OLS estimator, Gauss-Markov and Inference	
7	Multiple Linear Regression: Qualitative Information (Dummy Variables)	
8	Further issues on functional form	
9	Differences-in-Differences	
		Problem Set 3
10	Instrumental Variables. Motivation	
11	Two Stage Least Squared	Research Project
	Further issues with Instrumental Variables	Ů