Syllabus Attività Formativa

Anno Offerta	2017
Corso di Studio	LM19F - ECONOMIA E FINANZA
Regolamento Didattico	LM19F-17
Percorso di Studio	19FLMF1 - FINANCE
Insegnamento/Modulo	SJH - ECONOMETRIC THEORY - ECONOMETRIC THEORY
Attività Formativa Integrata	-
Partizione Studenti	-
Periodo Didattico	S2 - Secondo Semestre
Sede	
Anno Corso	1
Settore	SECS-P/05 - ECONOMETRIA
Tipo attività Formativa	B - Caratterizzante
Ambito	50493 - Economico
CFU	10.0
Ore Attività Frontali	90.0
AF_ID	28770

Tipo Testo	Codice Tipo Testo	Num. Max. Caratteri	Obbl.	Testo in Italiano	Testo in Inglese
Obiettivi Formativi Del Corso / Course	OBIETT_FORM	3800	Sì		The purpose of the course is to provide the necessary tools for a thorough understanding of asymptotic theory in classical econometrics. The course goals are

Formative Objectives					1) to be able to perform estimation and testing in linear cross-section regression models, to be sufficiently comfortable with asymptotic theory for linear models, 2) to be able to implement basic cross-section methods as needed for a advanced thesis.
Prerequisiti / Prerequisites	PREREQ	3800	Sì		An econometric class similar to Applied Statistics and Econometrics.
Contenuti Del Corso / Course Contents	CONTENUTI	3800	Sì		Some of the topics covered are: statistic foundations, single-equation linear model, and OLS Estimation. Asymptotic properties of OLS estimators. Testing (Likelihood-type, Wald, Lagrange). Measurement Error. Omitted variables. Instrumental variables estimation of the single-equation linear model. Panel Data. Generalized Method of Moments. Time Series modeling. Vector Autoregression.
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 1 /	PROGR_EST_1	3800	Sì		A modicum of asymptotic theory for econometricians

Extended Program And Reference Reading Material: Week 1					
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 2 / Extended Program And Reference Reading Material: Week 2	PROGR_EST_2	3800	Sì		Linear model: consistency, asymptotic normality, and behavior under misspecification.
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 3 / Extended Program And Reference Reading	PROGR_EST_3	3800	Sì		Linear model: triad of tests (LM, LR, and Wald)

Material: Week 3					
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 4 / Extended Program And Reference Reading Material: Week 4	PROGR_EST_4	3800	Sì		Omitted variables and measurement error.
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 5 / Extended Program And Reference Reading Material: Week 5	PROGR_EST_5	3800	Sì		Instrumental variables.
Programma Esteso E	PROGR_EST_6	3800	Sì		Econometric methods for panel data.

Materiale Didattico Di Riferimento: Settimana 6 / Extended Program And Reference Reading Material: Week 6					
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 7 / Extended Program And Reference Reading Material: Week 7	PROGR_EST_7	3800	No		Time series: stationarity, ergodicity and the Wold representation of stochastic processes.
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 8 / Extended	PROGR_EST_8	3800	No		Autoregressive moving average models.

Program And Reference Reading Material: Week 8					
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 9 / Extended Program And Reference Reading Material: Week 9	PROGR_EST_9	3800	No		Vector autoregressions
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 10 / Extended Program And Reference Reading	PROGR_EST_10	3800	No		Latent variable models and the Kalman Filter

Material: Week 10					
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 11 / Extended Program And Reference Reading Material: Week 11	PROGR_EST_11	3800	No		Generalized method of moments.
Programma Esteso E Materiale Didattico Di Riferimento: Settimana 12 / Extended Program And Reference Reading Material: Week 12	PROGR_EST_12	3800	No		Stochastic Volatility Models in Discrete and Continuous time.
Testi Di Riferimento /	TESTI_RIF	3800	Sì		Hansen, Bruce. Econometrics. (Freely downloadable from author website).

Reference Books					Wooldridge, Jeffrey. Econometric Analysis of Cross Section and Panel Data. The MIT press. Hamilton, James Douglas. Time series analysis. Vol. 2. Princeton: Princeton university press, 1994. Other readings will be assigned as needed.
Metodologie Didattiche / Teaching Method	METODI_DID	3800	Sì		Lectures and practice sections. The practice sessions are designed to cover more deeply the subjects introduced in class. The numerical/statistical software MATLAB will be extensively used in these sessions.
Modalita' Di Verifica Dell'apprendimento / Assessment Method	MOD_VER_APPR	3800	Sì		Final written exam
Criteri Per L'assegnazione Dell'elaborato Finale / Criteria for	CRIT_ASS_ELA	3800	Sì		Final

assigning the Master thesis					