## Ενδεικτική Ύλη Προκριματικών Εξετάσεων και Προτεινόμενα Διδακτικά Εγχειρίδια

## Μικροοικονομική

Optimization and Competitive Equilibrium, General Equilibrium and Welfare, Game Theory, Asymmetric Information and Mechanism Design.

Mas-Colell, A., M. Whinston and J. Green, *Microeconomic Theory*, Oxford, 1995 Kreps, D., *A Course in Microeconomic Theory*, Princeton, 1990 Varian, H., *Microeconomic Analysis*, Norton, 1992 Gibbons, R., *A Primer in Game Theory*, Harvester Whaetsheaf, 1992

## Μακροοικονομική

Solution of main models in dynamic general equilibrium macroeconomics using advanced analytical methods. The models include the competitive equilibrium and the social planner problems in the Ramsey economy, human capital, technology and the public sector as sources of endogenous growth, money in the Ramsey economy, real business cycles and DSGE modeling, the open economy with flexible and sticky prices, asset pricing, OLG models, DGE models with exogenous policy and DGE models with optimal policy.

Barro R. and X. Sala-I-Martin. Economic Growth, 2nd edition. Prentice Hall India, 2003. Blanchard O. and S. Fisher. Lectures on Macroeconomics. MIT Press, 1989. Ljungqvist L. and T. Sargent. Recursive Macroeconomic Theory, 4th edition. MIT Press, 2018. Wickens M.. Macroeconomic Theory: A Dynamic General Equilibrium Approach, 2nd Edition. Princeton University Press, 2012.

## Ποσοτικές Μέθοδοι (Οικονομετρία και Στατιστική)

Statistics: random variables, distributions, moments, estimators, testing, large sample theory. Readings: Greene (Appendices B, C, D).

Classical Linear Regression (CLR) model: definition-assumptions, OLS algebra, finite sample properties, hypothesis testing under normality. Readings: Greene (ch 2-5), Hayashi (ch 1).

Large sample properties of the OLS. Hypothesis testing without the normality assumption. Readings: Greene (ch 4.4), Hayashi (ch 2).

Maximum Likelihood (ML) estimation of the CLR model: formulation, estimation, testing. Readings: Greene (ch 14), Hayashi (ch 1).

Restricted ML estimation, Neyman tests,  $\chi^2$  tests, and the Classical Tests: LR, W and LM. Readings: Demos (ch12, ch13, and ch 14)

Generalized Least Squares (GLS): Heteroskedasticity, Autocorrelation. Readings: Greene (ch 9, 20), Hayashi (ch 1, 2).

Instrumental Variables (IV) and Generalized Method of Moments (GMM): Estimation and testing. Readings: Greene (ch 13), Hayashi (ch 3).

- W.H. Greene (2012): Econometric Analysis, 7th ed, Prentice Hall. <a href="http://pages.stern.nyu.edu/~wgreene/Text/econometricanalysis.htm">http://pages.stern.nyu.edu/~wgreene/Text/econometricanalysis.htm</a>
- F. Hayashi (2000): Econometrics, Princeton UP ch1 can be freely downloaded. (http://fhayashi.fc2web.com/hayashi\_econometrics.htm)
- J. Johnston and J. DiNardo (1997): Econometric Methods, 4th ed, McGraw-Hill.
- A. Demos (2002): Notes on Probability Theory and Statistics, <a href="http://www.aueb.gr/users/demos/pro-stat.pdf">http://www.aueb.gr/users/demos/pro-stat.pdf</a>