

**SHORT LIST OF TOPICS FOR THE MACRO-INTENSIVE ECON EXAM
FOR ADMISSIONS TO NES ASPIRANTURA PROGRAM**

ECONOMETRICS I

This course is included both in micro and macro intensive exams. The associated topics are listed in the table below. All chapter numbers refer to the following textbook:

Wooldridge, J.M., *Introductory Econometrics: A Modern Approach* (5th edition), South-Western Cengage Learning, 2012

Topic	Chapter
Causality	1.4
Omitted variable bias, Multiple regression, OLS estimator	3
Hypothesis testing, t-test and F-test, Confidence intervals	4
OLS Asymptotics	5
Functional form, Log transforms, dummies, polynomials, and interactions	6.1-6.3, 7.1-7.4, 7.7
Heteroskedasticity, Heteroskedasticity-robust inference,	8.1-8.2

Expect questions that demand simple derivations and knowledge of most fundamental concepts and methods.

MICROECONOMICS I

This course is included both in micro and macro intensive exams. The associated topics are listed in the two tables below. All chapter numbers refer to the following textbook:

Mas-Colell A., M. Whinston and J. Green, *Microeconomic Theory*, Oxford University Press, 1995.

Consumer Theory	Chapter
Properties of preference relations (completeness, transitivity, local non-satiation, convexity)	3.B
Utility maximization, Walrasian demand, Indirect utility function	3.D
Expenditure minimization, Hicksian demand, Duality between Walrasian and Hicksian demand	3.E
Walras law	2.E
Wealth and price effects, Elasticities of demand	2.E
Slutsky wealth compensation, Slutsky matrix, Substitution effects	2.F
Compensated law of demand	2.F, 3.E

Uncertainty	Chapter
Absolute and relative risk aversion	6.C
Insurance and asset demand	6.C
First and second order stochastic dominance	6.D

Expect questions that demand simple calculations, graphical illustrations, and knowledge of most fundamental concepts and theorems. In the context of uncertainty, we shall focus on simple (finitely supported) lotteries described in Chapter 6.B.

MACROECONOMICS I

This course is included both in micro and macro intensive exams. The associated topics are listed in the two tables below. All chapter numbers refer to the following textbook:

Mankiw, N. Gregory, *Macroeconomics*, 8th edition, Worth Publishers 2012.

The Economy in the Long Run	Chapter
The Closed economy	3.1 – 3.4
The Open Economy	6.1 – 6.3

Growth Theory	Chapter
The Solow model	8.1 – 8.3

Expect questions that demand simple calculations and graphical illustrations. In the context of the Solow model, you should understand how to derive the steady-state levels of capital and consumption.

MACROECONOMICS 2

This course is included only in the macro intensive exam. The associated topics are listed in the two tables below. All chapter numbers refer to the following textbooks:

(M) Mankiw, N. Gregory, *Macroeconomics*, 8th edition, Worth Publishers 2012.

(SL) Jeffrey D. Sachs and Felipe Larrain B. *Macroeconomics in the Global Economy*. Prentice-Hall, Inc., 1993.

Aggregate Demand and Aggregate Supply	Chapter
Different theories of aggregate supply: New Classical versus New Keynesian approach. Long run versus short run.	M.10, SL.3
Aggregate Demand	M.10

IS-LM model	Chapter
The IS-LM framework in a closed economy and the effect of fiscal and monetary policies.	M.11 – M.12, SL.12

Expect questions that demand knowledge of AD-AS theory, intuition from the models and graphical illustrations.

MACROECONOMICS 3

This course is included only in the macro intensive exam. It covers mostly the Neoclassical Growth Model (NGM). All chapter numbers refer to the following textbook:

Acemoglu, Daron. *Introduction to modern economic growth*. Princeton university press, 2009.

Or you can use any other advanced macro textbook. For instance:

Blanchard, Oliver J. & Fischer, Stanley, *Lectures on Macroeconomics*, The MIT Press, 1989

Neoclassical Growth Model	Chapter
Optimality conditions and the Balanced Growth Path	A.8

Expect questions that demand understanding of NGM, knowledge of the optimality conditions from the model, and intuition from the model. Knowledge of optimal control would be a plus, but not required

MACROECONOMICS 4

This course is included only in the macro intensive exam. It covers theories of Consumption and Investment, and requires knowledge of basic Optimal Control (continuous time). The associated topics are listed in the two tables below. All chapter numbers refer to the following textbook:

Romer, David, *Advanced Macroeconomics*, McGraw-Hill, 5th ed., 2019

Consumption	Chapter
The Life Cycle/Permanent Income Hypothesis	R.8.1
Consumption under uncertainty: Random Walk Hypothesis	R.8.2

Investment	Chapter
A model of investment with adjustment costs, Tobin's q , its empirical testing, Hayashi conditions	R.9

Expect questions that demand optimal control theory and graphical illustrations. In the context of Investment, focus on continuous time cases.