Macroeconomics I

Academic Year: (2019 / 2020) **Review date: 20-05-2019**

Department assigned to the subject: Economics Department

Coordinating teacher: EROSA ETCHEBEHERE, ANDRES

Type: Compulsory ECTS Credits : 9.0

Year : 1 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Intro to Statistics and Mathematics

OBJECTIVES

Basic Skills
Develop knowledge that is the basis for developing new knowledge, often in a research context.
Students should be able to apply the concepts learn to new problems and to new areas of knowledge that are related to area of study of the student.
Students should be able to integrate diverse concepts and confront new realities and be able to judge ethical aspects when applying the concepts learned.
Students should be able to communicate results and knowledge to the general public and to specialized audiences in a clear and unambiguous fashion.
Students should acquire the ability for independent learning.

General Skills
To analyze and summarize a scientific text.
To interpret and elaborate advanced studies in economics.
To apply advance knowledge in economics, mathematics, and econometrics.
To evaluate scientific articles.
To prepare and present scientific documents.
To identify key conventions in sciences and, in particular, economics.
To identify the value added by a scientific contribution.

Specific Skills
To apply and understand dynamic general equilibrium theory
To apply and understand the neoclassical growth model
To apply and understand overlapping generations models
To describe and analyze consumption decisions under uncertainty
To apply and understand asset pricing models
To understand and analyze the role of money and inflation in general equilibrium models
To understand the basic real business cycle model
To understand and evaluate alternative public polices and their macroeconomic consequences.

Learning results
1. Understand and solve dynamic general equilibrium models that are the bases of modern macroeconomic theory.
2. Learn to develop dynamic macroeconomic models.
3. Understand the workhorse models of modern macroeconomic theory: neoclassical growth model, models of consumption-savings, overlapping generations models.
4. Develop the ability to use dynamic general equilibrium models to analyze economic growth, effects of aggregate shocks as well as the consequences of market imperfections for the behavior of the economy.
5. To develop the ability to formulate and solve dynamic models with uncertainty.
6. To understand and apply asset pricing theory in economies with aggregate uncertainty.
7. Estimation-calibration of macroeconomic models.
8. Study counterfactuals using quantitative macro models.
9. Develop the ability to evaluate monetary and fiscal policies.

DESCRIPTION OF CONTENTS: PROGRAMME

The course teaches dynamic general equilibrium theory, which is the framework used in modern macroeconomic analysis. The course introduce concepts, tools and results of modern macroeconomic theory.
1. Dynamic General Equilibrium Theory: introduction to dynamic optimization, competitive equilibrium, Arrow-Debreu market structure, competitive equilibrium with sequential markets, welfare theorems.
2. The neoclassical growth theory: competitive equilibrium, stationary equilibrium, calibration, dynamics, effects of taxes and public expenditures, debt, Ricardian Equivalence, the neoclassical model in continuous time.
3. Overlapping generation models: multiplicity of equilibrium, efficiency, money, capital accumulation and the possibility of dynamic inefficiency, social security, government debt, Ricardian Equivalence.
4. Uncertainty: complete markets, consumption and risk, asset pricing, Arrow Securities, risk premium, pricing of options.
5. Money: introduction to monetary models, monetary policy and inflation, Fridman rule.
6. Ramsey Taxation: implementation, optimal taxation, time consistent policies, taxation over time.

LEARNING ACTIVITIES AND METHODOLOGY

Learning activities

Theory class
Recitation
Group assignments
Individual assignments
Reading assignments and class discussions
Office hours

Methodology
Lectures with slides in which the professor teaches basic concepts, distribute assignments, and presents the readings necessary to complement the class activities.
Critical readings of the material presented by the professor: newspaper articles, reports, class notes, academic articles.
Analysis of practical cases and problem solving of exercises provided in class to be solved individually or in teams.
Presentation and discussion in class of topics related to the course as well as discussion of practical cases.
Individual or team assignments.

ASSESSMENT SYSTEM

Homework 20%, Midterm Exam 30%, and Final Exam 50%.

Extraordinary Exam: Final Exam (100%).

% end-of-term-examination:	50
% of continuous assessment (assigments, laboratory, practicals…):	50

BASIC BIBLIOGRAPHY

- L. Ljungqvist and T.J. Sargent Recursive Macroeconomic Theory, MIT press, 2004
- ROMER, DAVID Advanced Macroeconomics, Mc Graw Hill, 2012
- T.F. Cooley Frontiers of Business Cycle Research, Princeton University Press, 1995

ADDITIONAL BIBLIOGRAPHY

- D. Krueger Macroeconomic Theory, mimeo University of Pennsylvania, 2011