Foundations of Economics

Root Number: 441667 – HS2022

Semester: Fall semester - HS 2022

ECTS: 8 ECTS

Lecturers: Selina Hauser (Mathematics), Irene Garcés Iriarte (Microeconomics) & Octavio Fernández-Amador (Macroeconomics)

Dates:
Wednesdays: 10:00 – 12:00
Fridays: 14:00 – 17:00 (some sessions end at 16:00)
For exceptions please see calendar for exact dates and times

Audience:
- Master of Advanced Studies of International Law and Economics (MILE) Students – Compulsory
- Joint LL.M. / Diploma of Advanced Studies Trade and Investment Law (TRAIL+) Students - World Trade Institute / Faculty of Law, Unibe - Compulsory
- This course is not open to MILE a la Carte

CONTENTS

COURSE DESCRIPTION

This is an introductory course to Microeconomics and Macroeconomics for International Economics. Before the beginning of the course there will be an introductory course on Mathematics and Statistics. Students will gain a basic understanding of the most important economic theories on micro-economics, specifically the basic concepts of demand and supply, consumer- and producer theory, and market structures. Students will also be introduced to the foundations of macroeconomic analysis, in particular to concepts like the goods and financial markets, the functioning of macroeconomic policies, balance of payments and the exchange rates. This course will provide the students with a solid foundation for the course on international trade theory in the second semester.

Detailed description by subject

Math and Statistics

The course revises topics on mathematics and descriptive statistics that are relevant to understand the economic analysis studied in the modules of the Master of International Law and Economics with focus on economic topics.

Microeconomics

The goal of the course is to gain a basic understanding of the most important economic theories on micro-economics. This will provide students with a foundation of microeconomic concepts and will enable them to understand the basic economics also relied on in the international trade literature. For this, some introductory topics in economics will be discussed such as demand and supply, consumer theory, and market structures. After the course, students should be able to explain the main concepts and theories on microeconomics and be able to follow the course on international trade.

The course comprises 7 lectures of 2-3 hours each (16 hours in total) plus 3 hours for the final exam. The module is structured as follows: The first session will be devoted to a short revision of the basics of supply and demand and to study consumer behavior. The second session will focus on individual and market demand, and the third session will focus on production. In sessions four and five the discussion will focus on the cost of production and the profit maximizing behavior of firms. In session six all the concepts discussed so far will be applied to do an analysis of competitive markets. The final session will be devoted to discuss the concept of market power, with a special focus on monopolistic competitive markets.

The main reference is the textbook by Pindyck and Rubinfeld on Microeconomics. Students are expected to work through the book chapters indicated in this syllabus before class in order to facilitate their comprehension of the material to be discussed. In class, the material is discussed together thoroughly.

Macroeconomics

This is an introductory course to the core field of macroeconomics and international macroeconomics. Students will be introduced to the foundations of macroeconomics. They will learn the functioning of goods and financial markets, the basic analysis of monetary and fiscal policies, as well as concepts like the balance of payments, the exchange rate, currency markets, international capital mobility, purchasing power parity, and interest rate parity. This will enable them to better understand and interpret recent macroeconomic developments and the implications for government policies and markets. We shall address the economic policy options available to governments in the present era of economic globalization.

The main reference is the textbook by Blanchard (BLA, hereafter). In some lessons, we will supplement the textbook with other readings from sources such as academic journals, institutional reports, outlooks, and specialized news.

The course is organised to provide the theoretical underpinnings and some recent examples during the lectures. It is required from the students to read the main readings for each lecture to facilitate their understanding of the material to be discussed. In class, the material is discussed together thoroughly. It is expected from students their participation in class and their preparation of the material and exercises required.

Lecturers

Selina Hauser

Selina Hauser is a PhD candidate in Economics at the World Trade Institute (WTI) under the supervision of Prof. Dr. Joseph Francois. Her research aims to achieve a more comprehensive view on the interaction between complex trade networks (global value chains, bilateral regulatory heterogeneity) on international trade flows and labor market transformations. She has been involved in the compilation of a new data set on the Design of Preferential Trade Agreements with focus on investment. To conclude the project she has worked for the OECD as temporary Junior Research Analyst supporting both, the trade and investment division with her knowledge of the database. Selina, a Swiss citizen, holds a master's degree in Applied Economic Analysis with special qualification in Trade and International Development from the University of Bern.

Irene Garcés Iriarte

Irene is a Ph.D. candidate in Economics at the World Trade Institute (WTI). Her research aims to gain a better understanding of the impact of bilateral regulatory heterogeneity on International Trade flows and policy-making under a research project funded by the SNFS. She holds a Bachelor's degree in Economics at the University of Zaragoza (Spain) being awarded Graduation Prize of the promotion. In the last year of her degree, she also worked as a research assistant in a project funded by the Ministry of Education in Spain. She completed a Master's degree in Economic Development and Growth at the University Carlos III in Madrid (Spain). Before joining the WTI, Irene has worked as an economic consultant in a top leading financial consulting firm. Her areas of research interest include international trade, econometrics, and economic development.

Octavio Fernández-Amador

Octavio Fernández-Amador is a senior researcher at World Trade Institute. He holds a PhD in Economics from the University of Innsbruck (Austria) and a degree in Economics from University of Sevilla (Spain). He has previously worked as a Postdoc Assistant Professor at Johannes Kepler University Linz (Austria). Octavio has collaborated in projects with different institutions. His field of research is applied econometrics and macro-econometrics. He has worked on international macroeconomics, monetary economics, applied econometrics, time series analysis, and the quantitative analysis of climate change. Octavio has published in various international scientific journals.

Math and Statistics

- Revising basic mathematical and statistical concepts;
- Understanding the use of those concepts in economics.

Microeconomics

- Understanding the basics of micro-economics as a foundation to economics;
- Understanding how, given technology, a firm minimizes its costs
- Learning how profit maximizing firms act on competitive and non-competitive markets

Macroeconomics

- Understanding the most important concepts and tools for analysis of macroeconomics and international macroeconomics
- Being able to better understand and interpret recent macroeconomic developments in an international context
- Addressing the economic policies available to governments in the present era of economic globalization

RECOMMENDED LITERATURE

- Rosser, M. and P. Lis (2016): Basic Mathematics for Economists. 3rd edition. Routledge.
- Triola, M.F. Essentials of Statistics. 6th edition. Pearson.
- Pindyck, R., Rubinfeld, D. (2018): Microeconomics. 9th edition. Pearson.
- Blanchard (2016): Macroeconomics. 7th Global edition, Boston: Pearson Education.

Note: We will deliver additional readings in advance to help understand basic concepts related to the lectures and to supplement the compulsory readings either during the class or for the exercises proposed. The readings delivered will be considered part of the material to prepare the exam, unless the instructor excludes them from being part of the content of the exam.

Important: A positive evaluation of each of the three sub-modules of Foundations of Economics is necessary to complete the whole course with a positive grade!

Math and Statistics

- The grade will be based on an online final exam
- The grade on Math and Statistics counts for 15% of the final course grade

Microeconomics

- The grade will be based on an online final exam
- The grade on Microeconomics counts for 40% of the final course grade

Macroeconomics

- The grade will be based on an online final exam
- The grade on Macroeconomics counts for 45% of the final course grade

Lesson	Date	Weekday	Subject	Hours	Time	Lecturer	Topic	Reading
	09.21.22	Wed	Maths and Statistics	1	9:00-10:00	S. Hauser	Placement exam discussion	
1.S1	09.21.22	Wed	Maths and Statistics	2	10:00 -12.00	S. Hauser	Elementary Algebra, Functions, Equations, Growth Rates,	Rosser, M. "Basic Mathematics for Economists"
2.S2	09.23.22	Fri	Maths and Statistics	2	14:00 -16:00	S. Hauser	Differential Calculus; Statistics terminology, Frequency distributions,	Rosser, M. "Basic Mathematics for Economists" Triola, M.F. "Essentials of Statistcs"
3.S3	09.28.22	Wed	Maths and Statistics	2	10:00 -12.00	S. Hauser	Measures of Central Tendency and Location, Measures of dispersion and dependence, Index numbers	Triola, M.F. "Essentials of Statistcs"
4.S4	09.30.22	Fri	Maths and Statistics	3	14:00 -17:00	S. Hauser	Exercises	
SE	10.12.22	Wed	Maths and Statistics Exam	2	10:00 -12:00	S. Hauser	Exam	
5.Mi1	10.14.22	Fri	Microeconomics	3	14:00 -17:00	I. Garcés Iriarte	Very short revision: Supply and Demand; Consumer Behavior	Pindyck and Rubinfeld, Ch. 1-3
6.Mi2	10.19.22	Wed	Microeconomics	2	10:00 –12:00	I. Garcés Iriarte	Individual and Market Demand	Pindyck and Rubinfeld, Ch. 4
7.Mi3	10.21.22	Fri	Microeconomics	2	14:00 -16:00	I. Garcés Iriarte	Production	Pindyck and Rubinfeld, Ch. 6
8.Mi4	10.26.22	Wed	Microeconomics	2	10:00 –12:00	I. Garcés Iriarte	Cost of Production	Pindyck/ Rubinfeld, Ch. 7

9.Mi5	11.28.22	Fri	Microeconomics	2	14:00 - 17:00	I. Garcés Iriarte	Profit maximization	Pindyck and Rubinfeld, Ch. 8.1-8.8
10.Mi6	11.02.22	Wed	Microeconomics	2	10:00 – 12:00	I. Garcés Iriarte	Competitive markets	Pindyck and Rubinfeld, Ch. 9.1-9.4 + 9.6
11.Mi7	11.4.22	Fri	Microeconomics	3	14:00 – 17:00	I. Garcés Iriarte	Market power and monopolistic competition	Pindyck and Rubinfeld, Ch. 10.1-10.4 and Ch. 12.1
12.Ma 1	11.9.22	Wed	Macroeconomics	2	10:00 – 12:00	O. Fernández-Amador	The short run (I): The goods market; the short run (II): Financial markets.	BLA 3 & 4
13.Ma 2	11.11.22	Fri	Macroeconomics	3	14:00 – 17:00	O. Fernández-Amador	The short run (II): Financial markets; the short run (III): Goods and financial markets: The IS-LM model.	BLA 4 & 5
14.Ma 3	11.16.22	Wed	Macroeconomics	2	10:00 – 12:00	O. Fernández-Amador	The short run (III): Goods and financial markets: The IS-LM model; the short run (IV): The extended IS-LM model: financial markets revisited.	BLA 5 & 6
15.Ma 4	11.18.22	Wed	Macroeconomics	3	14:00 – 17:00	O. Fernández-Amador	The short run (IV): The extended IS-LM model: financial markets revisited; the medium run (I): The labor market.	BLA 6 & 7
16.Ma 5	11.23.22	Wed	Macroeconomics	2	10:00 – 12:00	O. Fernández-Amador	The medium run (I): The labor market; the medium run (II): The Phillips curve.	BLA 7 & 8
17.Ma 6	11.25.22	Fri	Macroeconomics	3	14:00 – 17:00	O. Fernández-Amador	The medium run (II): The Phillips curve; the medium run (III) The IS-LM-PC model.	BLA 8 & 9

18.Ma7	11.30.22	Wed	Macroeconomics	2	10:00 – 12:00	O. Fernández-Amador	The open economy (I): Openness in goods and financial markets; the open economy (II): The goods market.	BLA 17 & 18
19.Ma8	12.02.22	Fri	Macroeconomics	3	14:00 – 17:00	O. Fernández-Amador	The open economy (II): The goods market; the open economy (III):The Mundell-Fleming model.	BLA 18 & 19
MIE	12.09.22	Fri	Micro Exam	2	10:00 - 13:00	I. Garcés Iriarte	Exam	
MAE	12.16.22	Fri	Macro Exam	2	10:00 - 13:00	O. Fernandez	Exam	

Maths and Statistics (S. Hauser)

Topic:

- Revising mathematics (5 hours):
  Elementary algebra: notation, arithmetic operations, evaluating expressions; Equations: re-arranging terms, solving (linear) systems of equations; Functions: meaning and use, prominent types, plotting; Growth rates; Differential calculus: meaning and use, differentiation rules, elasticity.

- Revising descriptive statistics (4 hours):
  Terminology and types of variables; Frequency distributions and histograms; Measures of central tendency, location, dispersion and dependence; Index numbers.

Optional Reading Materials:

The lessons will revise the topics mentioned above. Students who have covered these concepts in high school should be able to follow without special reading. Background readings to refresh the material are

- Rosser, M. & Lis, P. (2016): Basic Mathematics for Economists. 3rd ed., Taylor & Francis Ltd;
- Keedy M.L. (1978), Algebra One, Addison-Wesley Publishing Company
- Triola, M.F (2011): Essentials of Statistics. 4th ed., Pearson.

Microeconomics (I. Garcés Iriarte)

Topics:

- Very short revision of the basics of supply and demand:
  (Note: Students are requested to have prepared this material before the beginning of the MILE/TRAIL+. The revision will be short and assume that students are familiar with the topic); The market mechanism; Elasticities and slopes; Supply and demand

- Consumer behavior:
  Consumer preferences; Budget constraints; Consumer choice; Revealed Preference; Marginal utility and consumer choice

Compulsory Reading Materials:

- Pindyck, R., Rubinfeld, D. (2018): Microeconomics. 9th edition. Pearson. Chapters 1-3

Optional Reading Materials:

- Machlup F. (1958): Equilibrium and Disequilibrium: Misplaced Concreteness and Disguised Politics. The Economic Journal, 68(269), 1-24.

Microeconomics (I. Garcés Iriarte)

Topics:

- Individual and market demand:

  Individual demand; Income and substitution effects; Market demand; Consumer surplus; Network externalities

Compulsory Reading Materials:

Pindyck, R., Rubinfeld, D. (2018): Microeconomics. 9th edition. Pearson. Chapter 4

Microeconomics (I. Garcés Iriarte)

Topics:

- Production:

  Firms and their production decisions; Production with one variable input (labor); Production with two variable inputs; Returns to scale

Compulsory Reading Materials:

- Pindyck, R., Rubinfeld, D. (2018): Microeconomics. 9th edition. Pearson. Chapter 4

Microeconomics (I. Garcés Iriarte)

Topics:

- The cost of production: Measuring cost; Cost in the short-run; Cost minimization in the long-run; Short- vs. long-run cost curves; (Dis-)economies of scale; The learning curve.

Compulsory Reading Material:

- Pindyck and Rubinfeld, Chapter 7.1 – 7.4 and 7.6

Further Comments: The students are expected to be especially familiar with the topics discussed in Pindyck and Rubinfeld, Chapter 7.1. Due to time constraints this section can be discussed only briefly in the lecture.

Microeconomics (I. Garcés Iriarte)

Topics:

- Profit maximization and competitive supply: The concepts of perfectly competitive markets and profit maximization; Marginal revenue, marginal cost, and profit maximization; Short- and long-run supply curves for firms and the market; Producer surplus; Output in the long-run; Effects of a tax on output.

Compulsory Reading Material:

- Pindyck and Rubinfeld, Chapter 8.1 – 8.8

Further Comments: The students are expected to be especially familiar with the topics discussed in Pindyck and Rubinfeld, Chapter 8.1 and 8.2. Due to time constraints this section can be discussed only briefly in the lecture.

Microeconomics (I. Garcés Iriarte)

Topics:

- The analysis of competitive markets: Gains and losses from government policies; Efficiency of competitive markets; Minimum prices; Price supports and production quotas.

Compulsory Reading Materials:

- *Pindyck and Rubinfeld, Chapter 9.1 – 9.4 and 9.6*

Microeconomics (I. Garcés Iriarte)

Topics:

- Part I: Market power: The monopoly and monopoly power; Sources of monopoly power; The social costs of monopoly power.
- Part II: Monopolistic competition

Compulsory Reading Materials:

- Pindyck and Rubinfeld, Chapter 10.1 – 10.4
- *Pindyck and Rubinfeld, Chapter 12.1*

Macroeconomics (O. Fernández-Amador)

Topics:

- The short run (I): The goods market.
  The goods market equilibrium and the determination of output; the interaction among demand, production and income; effects of fiscal policy on output.
- The short run (II): Financial markets.
  The equilibrium in financial markets and the determination of the interest rate in the short run; effects of monetary policy on the interest rate.

Suggested Reading Materials:

- BLA, chapters 3 and 4.

Macroeconomics (O. Fernández-Amador)

Topics:

- The short run (II): Financial markets.

  The equilibrium in financial markets and the determination of the interest rate in the short run; effects of monetary policy on the interest rate.

- The short run (III): Goods and financial markets: The IS-LM model.

  The equilibrium in the goods market: The IS relation; the equilibrium in the financial markets: The LM relation; the IS-LM model and the effects of fiscal and monetary policy; dynamics and the short-run description of the economy.

Suggested Reading Materials:

- BLA, chapters 4 and 5.

Macroeconomics (O. Fernández-Amador)

Topics:

- The short run (III): Goods and financial markets: The IS-LM model.
  The equilibrium in the goods market: The IS relation; the equilibrium in the financial markets: The LM relation; the IS-LM model and the effects of fiscal and monetary policy; dynamics and the short-run description of the economy.
- The short run (IV): The extended IS-LM model: financial markets revisited.
  Nominal and real interest rates; risk and interest rates; financial intermediaries; the extended IS-LM model; the recent financial crisis.

Suggested Reading Materials:

- BLA, chapters 5 and 6.

Macroeconomics (O. Fernández-Amador)

Topics:

- The short run (IV): The extended IS-LM model: financial markets revisited.
  Nominal and real interest rates; risk and interest rates; financial intermediaries; the extended IS-LM model; the recent financial crisis.
- The medium run (I): The labor market.
  Equilibrium in the labor market; wage and price determination; the natural rate of unemployment.

Suggested Reading Materials:

- BLA, chapters 6 and 7.

Macroeconomics (O. Fernández-Amador)

Topics:

- The medium run (I): The labor market.
  Equilibrium in the labor market; wage and price determination; the natural rate of unemployment.
- The medium run (II): The Phillips curve.
  The relationship between inflation, expected inflation, and unemployment; the Phillips curve and the natural rate of unemployment; the relation between unemployment and inflation cross-country and over time.

Suggested Reading Materials:

- BLA, chapters 7 and 8.

Macroeconomics (O. Fernández-Amador)

Topics:

- The medium run (II): The Phillips curve.

  The relationship between inflation, expected inflation, and unemployment; the Phillips curve and the natural rate of unemployment; the relation between unemployment and inflation cross-country and over time.

- The medium run (III): The IS-LM-PC model.

  The IS-LM-PC model; the dynamics of adjustment of output and inflation; two examples: The dynamic effects of fiscal consolidation and of oil price shocks.

Suggested Reading Materials:

- BLA, chapters 8 and 9.

Macroeconomics (O. Fernández-Amador)

Topics:

- The open economy (I): Openness in goods and financial markets.
  Implications of openness in goods and financial markets; the nominal exchange rate; the real exchange rate; the balance of payments of a country; the interest rate parity condition.
- The open economy (II): The goods market.
  The equilibrium in the goods market for an open economy and the trade balance; effects of domestic and foreign shocks; the effects of a real depreciation; the connection among savings, investment and the trade balance.

Suggested Reading Materials:

- BLA, chapters 17 and 18.

Macroeconomics (O. Fernández-Amador)

Topics:

- The open economy (II): The goods market.

   The equilibrium in the goods market for an open economy and the trade balance; effects of domestic and foreign shocks; the effects of a real depreciation; the connection among savings, investment and the trade balance.

- The open economy (III): The Mundell-Fleming model.

   Equilibrium in the goods and financial markets when including the foreign exchange market; the determination of output, interest rate and exchange rates; policy under flexible and fixed exchange rates.

Suggested Reading Materials:

- BLA, chapters 18 and 19.