# International Economics I

**Semester:** Fall semester - HS 2020

**ECTS:** 15

**Lecturers:** Doris Oberdabernig (Mathematics and Statistics, Microeconomics & Econometrics), Patrick Tomberger (Microeconomics & International Trade), Octavio Fernández-Amador (Macroeconomics)

**Dates:**
Wednesdays:          10:00 – 12:00 (some sessions start at
Fridays:                   9:00) 10:15 – 12:15 & 14:00 – 16:30
Some exceptions. 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 International Microeconomics, International Trade, International Macroeconomics, and the basics of econometrics in combination with the use of the statistical software STATA. Before the beginning of the course there will be an introductory course on Mathematics and Statistics.

Students will be introduced to the macroeconomic aspects of a country's international economic transactions and will come to understand important concepts like the goods and financial markets, currency markets, balance of payments, the exchange rate, purchasing power parity, and interest rate parity. The material delivered should enable the students to better understand and interpret recent macroeconomic and financial developments in the context of a globalized economy, and to understand the implications for government policies and markets. Economic policy options available to governments in the present context of economic globalization, in particular with respect to international currency systems will also be addressed.

A further goal of the course is to gain a basic understanding of the most important economic theories on micro-economics and international trade and to become familiar with the stylized facts on international trade. Students should acquire enough knowledge to be able to formulate a well-founded opinion about specific topics in the international trade literature such as the arguments for and against protection in the era of global value chains and the position of developing countries in international trade. To enable students to understand the basic economics international trade literature some introductory topics in economics will also be discussed such as demand and supply, consumer theory, and market structures.

The rationale underpinning this econometrics portion of the course offer is two-fold: First, learning about empirical approaches to the study of international trade will enable students to interpret output tables in academic research papers and work with their own datasets. The lessons learned from the econometrics module can then be used in subsequent economics courses in the MILE programme and provide an added-value to students when working on take-home essays or their specific thesis projects. Second, beyond the confines of the MILE programme, students will acquire skills in using the statistical software STATA, which is in high demand among employers both in the private and public sector. The course will begin with the basics of data analysis where students will learn how to feed data into the statistical software STATA, to calculate descriptive statistics and to plot graphics of interest. These introductory lectures will be followed by lectures on the simplest linear regression models and the procedure of statistical inference. Throughout the course, emphasis will be placed on the intuition behind econometric analysis. The main goal will be to communicate to students the merits of using a certain model as well as the main procedures through which results are obtained.

## 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 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 micro-economics 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.

## Econometrics

The course aims at introducing students to the basics of econometrics in combination with the use of the statistical software STATA. The rationale underpinning this course offer is two-fold: First, learning about empirical approaches to the study of international trade will enable students to interpret output tables in academic research papers and work with their own datasets. The lessons learned from the econometrics module can then be used in subsequent economics courses in the MILE programme and provide an added-value to students when working on take-home essays or their specific thesis projects. Second, beyond the confines of the MILE programme, students will acquire skills in using

the statistical software STATA, which is in high demand among employers both in the private and public sector. These considerations resonate well with the feedback from former MILE cohorts: The students who enrolled in the previous econometrics modules indicated that they see quantitative approaches to international trade as a stepping stone for their thesis projects or potential future employment.

The course comprises 6 lectures of 2 hours each (12 hours in total) plus a final examination. The module is structured as follows: The first session will be devoted to the basics of data analysis. Students will learn how to feed data into the statistical software STATA, to calculate descriptive statistics and to plot graphics of interest. Students are required to practice the use of the learned commands and apply them in practical exercises. The introductory lecture will be followed by lectures on the simplest linear regression models and the procedure of statistical inference. Throughout the course, emphasis will be placed on the intuition behind econometric analysis. The course is intensive and students are required to revise the material at home. The main goal will be to communicate to students the merits of using a certain model as well as the main procedures through which results are obtained.

**Note:** Due to the strong focus on hands-on learning, students must make sure that STATA is properly installed in their laptops before the beginning of Econometrics classes. The software will be provided by the WTI.


## Macroeconomics

This is an introductory course to the core field of International Macroeconomics: Balance of Payments and Foreign Exchange Markets. Students will be introduced to the monetary aspects of a country's international economic transactions. They will get to know the meaning of important 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 developments in international financial markets and to understand the implications for government policies and markets. We shall address the economic policy options available to governments in the present era of economic globalization, in particular, with respect to international currency systems (flexible vs. fixed exchange rates, currency unions).

The main reference is the textbook by Krugman, Obstfeld, and Melitz (KOM, hereafter), supplemented by the textbook by Blanchard (BLA, hereafter). 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 in order to facilitate their comprehension 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. We will provide a final review session devoted to prepare the students for the exam at the end of the week.

## International Trade

The goal of the course is to gain a basic understanding of the most important economic theories on international trade and to become familiar with the stylized facts on international trade. After the course students should be able to explain the main concepts and theories discussed in the economic literature on international trade. Students should also acquire the knowledge to be able to formulate a well-founded opinion about specific topics in the international trade literature such as the arguments for and against protection in the era of global value chains and the position of developing countries in international trade.

This module includes seven lectures of 2 - 3 hours (18 hours in total) plus 3 hours for the final exam. The first four lectures will make the students familiar with the trade models based on competitive markets: Ricardo's model of international trade, the specific factors model, the Heckscher-Ohlin model and the standard trade model. The following three lectures will be devoted to "new Trade" theories based on markets with imperfect competition. Specifically, we will discuss the role of external economies of scale in international trade and take a closer look at the firm in the global economy. In the last lecture also the most important instruments of trade policy will be discussed.

The compulsory reading for this module is the textbook of Krugman, Obstfeld and Melitz on international trade theory. In class we will discuss intensively the chapters indicated in this syllabus and the students are required to read those chapters before class.

## LECTURERS

### Doris Oberdabernig

Doris Oberdabernig is a senior researcher and a consultant to the World Trade Organization (WTO). Before joining the WTI, she worked as teaching and research associate at the Vienna University of Business and Economics in Austria, and as research associate at the Austrian Institute of Economic Research. She contributed to projects funded by the European Commission and the Swiss National Science Foundation, and worked as consultant for different World Bank projects and for the private sector. Doris holds a PhD in Economics, and degrees in Political Economy and in International Economics and Business Sciences from the University of Innsbruck (AT). Her field of research comprises applied econometrics, political economy, environmental economics, international economics and development, and she has published in various international scientific journals.

### Patrick Tomberger

Patrick Tomberger is a postdoc researcher at the World Trade Institute located in Bern. He holds a PhD in economics from the University of Linz (Austria) and degrees in political economy and political science from the University of Innsbruck (Austria). Before he joined the WTI, he worked as a predoc research assistant at the University of Linz. He also worked in projects funded by the Swiss National Science Foundation (SNSF) and as consultant for research projects of the World Bank Group. His main research interests include international economics, specifically global value chains and international trade, environmental economics, and multi-region input-output analysis. In that fields he has published in the peer-reviewed journals Applied Economics, Ecological Economics, Economics Letters, Environmental and Resource Economics, and The World Economy.

### Octavio Fernández-Amador

Octavio Fernández-Amador is a senior researcher at World Trade Institute and a consultant to the World Trade Organization (WTO). 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. Specially, he has worked on international macroeconomics, monetary economics, time series analysis, and the quantitative analysis of climate change. Octavio has published in various international scientific journals.

## LEARNING OBJECTIVES

### 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

### International trade
- Understanding the basic concepts of international trade, including how trade flows arise and develop, trade theories, market structures, global value chains and FDI, links to labor and capital markets, and geographical economics;
- Being able to work with the apprehended theories and link them to every-day economic situations and developments;
- Learning how to present theories and apply them and defend opinions in public and in class.

### Econometrics
- Understanding the basics of econometrics in combination with the STATA software.
- Understanding and utilizing the empirical approaches to the study of international trade.

### 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.
- Gaining understanding on the implications for government policies and markets of recent developments in international goods and financial markets.
- Gaining basic understanding on the implications for trade of the recent macroeconomic developments.
- Addressing the economic policy options available to governments in the present era of economic globalization with respect to international currency systems.

## RECOMMENDED LITERATURE

- Krugman, P.R., Obstfeld, M. & Melitz M. J. (2017): International Economics. Theory and policy. 11th edition, Harlow, Essex: Pearson Education. (10th edition -2014 also works)
- Pindyck, R., Rubinfeld, D. (2018): Microeconomics. 9th edition. Pearson.
- Wooldridge, J. (2016): Introductory Econometrics: A Modern Approach. 6th Edition. Cengage.
- 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.

## Complementary economic references [Optional and supplementary information for students]

### Books and online handbooks

1. Copeland, L. (2008): *Exchange rates and international finance*. 5th edition. Harlow, Essex: Pearson Education.
2. IMF (2009): *Balance of Payments and International Position Manual*. 6th edition.
3. Lequiller, F. and D. Blades (2006): *Understanding National Accounts*, OECD Publishing.
4. Mishkin, F.S. (2010): Economics of money, banking and financial markets. 8th edition. Harlow, Essex: Pearson Education.
5. Sarno, L. and M. Taylor (2002): *The economics of exchange rates*, Cambridge: Cambridge University Press.
6. Van Marrewijk, C. (2007): *International Economics*, Oxford: Oxford University Press.

## EXAMS AND GRADES

**Important: A positive evaluation of each of the five sub-modules of International Economics I is necessary to complete the whole module 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 10 % of the final course grade

### Microeconomics
- The grade will be based on an online final exam
- The grade on Microeconomics counts for 20 % of the final course grade

### International Trade
- The grade will be based on an online final exam
- The grade on International Trade counts for 25 % of the final course grade

### Econometrics
- The grade will be based on a replication exercise as explained in class
- The grade on Econometrics counts for 20% of the final course grade

### Macroeconomics
- The grade will be based on an online final exam
- The grade on Macroeconomics counts for 25 % of the final course grade

# COURSE OVERVIEW

| Lesson | Date | Weekday | Subject | Hours | Time | Lecturer | Topic | Reading |
|---|---|---|---|---|---|---|---|---|
| 1. Stat1 | 09.16.20 | Wed | Maths and Statistics | 3 | 09:00 - 12:00 | D. Oberdabernig | Elementary Algebra, Functions, Equations, Growth Rates, | Rosser, M. "Basic Mathematics for Economists" |
| 2. Stat2 | 09.17.20 | Thu | Maths and Statistics | 3 | 10:00 - 13:00 | D. Oberdabernig | Differential Calculus; Statistics terminology, Frequency distributions, | Rosser, M. "Basic Mathematics for Economists" Triola, M.F. "Essentials of Statistcs" |
| 3. Stat3 | 09.18.20 | Fri | Maths and Statistics | 3 | 10:15 – 13:15 | D. Oberdabernig | Measures of Central Tendency and Location, Measures of dispersion and dependence, Index numbers | Triola, M.F. "Essentials of Statistcs" |
| Exam | 09.25.20 | Fri | Maths and Statistics Exam | 2 | 10:15-12:15 | D. Oberdabernig | Online exam | |
| 4. Micro 1 | 09.30.20 | Wed | Microeconomics | 3 | 09:00 - 12:00 | D. Oberdabernig | Very short revision: Supply and Demand; Consumer Behavior | Pindyck and Rubinfeld, Chapters 1-3 |
| 5. Eco 1 | 10.02.20 | Fri | Econometrics | 2 | 10:15 - 12:15 | D. Oberdabernig | The STATA environment | Rodriguez, G. STATA Tutorial |
| 6. Macro 1 | 10.02.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The short run (I): The goods market; the short run (II): Financial markets. | BLA 3 & 4 |
| 7. Mirco 2 | 10.07.20 | Wed | Microeconomics | 2 | 10:00 - 12:00 | D. Oberdabernig | Individual and Market Demand | Pindyck and Rubinfeld, Chapter 4 |
| 8. Eco 2 | 10.09.20 | Fri | Econometrics | 2 | 10:15 - 12:15 | D. Oberdabernig | Simple linear regression model | Wooldridge Ch1 & 2 |
| 9. Macro 2 | 10.09.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The short run (II): Financial markets; the short run (III): Goods and financial markets: The IS-LM model. | BLA 4 & 5 |
| 10. Micro 3 | 10.14.20 | Wed | Microeconomics | 2 | 10:00 - 12:00 | D. Oberdabernig | Production | Pindyck and Rubinfeld, Chapter 6 |
| 11. Eco 3 | 10.16.20 | Fri | Econometrics | 2 | 10:15 - 12:15 | D. Oberdabernig | Multiple linear regression model | Wooldridge Ch 3 |
| 12. Macro3 | 10.16.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | 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 |

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| 13. Micro 4 | 10.21.20 | Wed | Microeconomics | 2 | 10:00- 12:00 | P. Tomberger | Cost of Production | Pindyck/ Rubinfeld, Ch7 |
| 14. Eco 4 | 10.23.20 | Fri | Econometrics | 2 | 10:15 - 12:15 | D. Oberdabernig | Statical Inference | Wooldridge Ch 4 |
| 15. Macro 4 | 10.23.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The short run (IV): The extended IS-LM model: financial markets revisited; the medium run (I): The labor market. | BLA 6 & 7 |
| 16. Micro 5 | 10.28.20 | Wed | Microeconomics | 3 | 09:00 - 12:00 | P. Tomberger | Profit maximization | Pindyck and Rubinfeld, Ch. 8.1-8.8 |
| 17. Eco 5 | 10.30.20 | Fri | Econometrics | 2 | 10:15 - 12:15 | D. Oberdabernig | Non-Linearities & Interaction Effect | Wooldridge Ch 6 |
| 18. Macro 5 | 10.30.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The medium run (I): The labor market; the medium run (II): The Phillips curve. | BLA 7 & 8 |
| 19. Micro 6 | 11.04.20 | Wed | Microeconomics | 2 | 10:00 - 12:00 | P. Tomberger | Competitive markets | Pindyck and Rubinfeld, Ch. 9.1-9.4 + 9.6 |
| 20. Eco 6 | 11.06.20 | Fri | Econometrics | 2 | 10:15 - 12:15 | D. Oberdabernig | Further topics | Wooldridge Ch 8, 14, 15 |
| 21. Macro 6 | 11.06.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The medium run (II): The Phillips curve; the medium run (III) The IS-LM-PC model. | BLA 8 & 9 |
| 22. Micro 7 | 11.11.20 | Wed | Microeconomics | 2 | 10:00 - 12:00 | P. Tomberger | Market power and monompolistic competition | Pindyck and Rubinfeld, Ch. 10.1-10.4 and Ch. 12.1 |
| 23. T1 | 11.13.20 | Fri | Trade | 2 | 10:15 - 12:15 | P. Tomberger | Overview and Ricardo's model | KOM, Ch. 1-3 |
| 24. Macro 7 | 11.13.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The open economy (I): Openness in goods and financial markets; the open economy (II): The goods market. | BLA 17 & 18 |
| 25. T2 | 11.18.20 | Wed | Trade | 3 | 09:00 - 12:00 | P. Tomberger | Ricardo cnt' and specific factors model | KOM, Ch. 3-4 |
| 26. T3 | 11.20.20 | Fri | Trade | 2 | 10:15 - 12:15 | P. Tomberger | Heckscher-Ohlin | KOM, Ch. 5 |
| 27. Macro 8 | 11.20.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The open economy (II): The goods market; the open economy (III): The Mundell-Fleming model. | BLA 18 & 19 |
| Exam | 11.25.20 | Wed | Microeconomics Exam | 3 | 09:00 – 12:00 | D. Oberdabernig/ P. Tomberger | Online exam | |
| 28. T4 | 11.27.20 | Fri | Trade | 3 | 10:15 - 13:15 | P. Tomberger | Standard trade model | KOM, Ch. 6 |

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|---|---|---|---|---|---|---|---|---|
| 29. Macro 9 | 11.27.20 | Fri | Macroeconomics | 2.5 | 14:00 - 16:30 | O. Fernandez | The open economy (III): The Mundell-Fleming model; the open economy (IV): Exchange rate regimes. | BLA 19 & 20 |
| 30. T5 | 12.02.20 | Wed | Trade | 3 | 09:00 -12:00 | P. Tomberger | External economies and location of production | KOM, Ch. 7 |
| 31. T6 | 12.04.20 | Fri | Trade | 3 | 10:15 - 13:15 | P. Tomberger | Firms in the global economy | KOM, Ch. 8 |
| 32. T7 | 12.04.20 | Fri | Trade | 2 | 14:00 - 16:00 | P. Tomberger | Firms in the global economy cnt' and instruments of trade policy | KOM, Ch. 8 - 9 |
| Exam | TBC | | Macroeconomics Exam | | | O. Fernandez | Online exam | |
| Exam | TBC | | Trade Exam | | | P. Tomberger | Online exam | |

**Maths and Statistics (D. Oberdabernig)**

*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 (D. Oberdabernig)**

*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.

**Econometrics (D. Oberdabernig)**

*Topics:*

- The STATA Environment:
  User surface and basic navigation; Dataset structures (cross-section, panel, bilateral data, time series); Data import; Command syntax (saving commands, data manipulation, …); Graphs

*Suggested Reading Materials:*

- Rodriguez, G. STATA Tutorial, available at: http://data.princeton.edu/stata/

**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.

**Microeconomics (D. Oberdabernig)**

*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

**Econometrics (D. Oberdabernig)**

*Topics:*

Simple Linear Regression Model:

      Intuition; Mechanism of estimation (OLS); Output interpretation; Model quality (R2)

*Compulsory Reading Material:*

Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapters 1 and 2.

## 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.

**Microeconomics (D. Oberdabernig)**

*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

**Econometrics (D. Oberdabernig)**

*Topics:*

- Multiple Linear Regression Model:
  Intuition; Mechanism of estimation (OLS); Output interpretation; Model quality ($R^2$ and adjusted $R^2$); Omitted variable bias; Multicollinearity

*Compulsory Reading Material:*

- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapter 3

**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.

## Microeconomics (P. Tomberger)

*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.*

**Econometrics (D. Oberdabernig)**

*Topics:*
- Statistical Inference:
  Rationale for hypothesis testing; Mechanism of hypothesis testing

*Compulsory Reading Material:*
- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapter 4.

**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.

## Microeconomics (P. Tomberger)

*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.*

**Econometrics (D. Oberdabernig)**

*Topics:*
- Non-Linearities & Interaction Effects
  Functional form; Scaling and beta coefficients; Dummy variables; Interaction effects: One and two regressors

*Compulsory Reading Material:*
- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapter 6.

**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.

## Microeconomics (P. Tomberger)

*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*

**Econometrics (D. Oberdabernig)**

*Topics:*

- Recap and short introduction to further concepts:
  (Note: depending on time, one or more of the following topics may be discussed)
  Heteroscedasticity; Fixed effects; Endogeneity

*Reading Material:*

- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Heteroscedasticity: Chapter 8; Fixed effects: Chapter 14; Endogeneity: Chapter 15

**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.

## Microeconomics (P. Tomberger)

*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*

**International Trade (P. Tomberger)**

*Topics:*

- Part I: Overview over the lecture content
- Part II: The Ricardian model: The concept of comparative advantage; Comparative advantage and the pattern of trade (one-factor economy); Gains from trade; Misconceptions about comparative advantage.

*Compulsory Reading Materials:*

- Krugman et al. (2018): Ch. 1 – 2 and Ch. 3 (until "Misconceptions about Comparative Advantage")

*Further Comments: The students are expected to be especially familiar with the topics discussed in Krugman et al. (2018), chapters 1 and 2. Due to time constraints these chapters cannot or only briefly be discussed in the lecture.*

**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.

**International Trade (P. Tomberger)**

*Topics:*

- Part I: The Ricardian model 2: Comparative advantage with many goods; Empirical evidence on the Ricardian model.
- Part II: Specific factors and income distribution; The specific factors model; International trade in the specific factors model; Income distribution and gains from trade; The political economy of trade: a preliminary view.

*Compulsory Reading Materials:*

- Krugman et al. (2018): Ch. 3
- Krugman et al. (2018): Ch. 4 (excluding "International Labor Mobility")

**Internatonal Trade (P. Tomberger)**

*Topics:*

- Resources and trade - The Heckscher-Ohlin model: Modelling a two-factor economy; Effects of international trade between two-factor economies; Empirical Evidence on the Heckscher-Ohlin model.

*Compulsory Reading Materials:*

- *Krugman et al. (2018): Ch. 5*

**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.

**International Trade (P. Tomberger)**

*Topics:*

- Part I: The Standard trade model: A Standard model of a trading economy; Tariffs and export subsidies.
- Part II: Trade theory applied to policy analysis 1.

*Compulsory Reading Materials:*

- Krugman et al. (2018): Ch. 6 (except "International Borrowing and Lending")
- *Gelhar, M. (1996): "Historical analysis of growth and trade patterns in the Pacific Rim: An evaluation of the GTAP framework", in: Hertel, T. (ed.): "Global Trade Analysis", Princeton University Press. Purdue University, Indiana. 1997.*

**Macroeconomics (O. Fernández-Amador)**

*Topics:*

- 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.
- The open economy (IV): Exchange rate regimes.
  Properties of different exchange rate regimes; the fixed and the flexible exchange-rate regimes revisited; a comparison of exchange rate regimes.

*Suggested Reading Materials:*

- BLA, chapters 19 and 20.

**International Trade (P. Tomberger)**

*Topics:*

- Part I: External economies of scale and the international location of production: Economies of scale and market structure; The theory of external economies; Specialized suppliers; Labor market pooling; Knowledge spillovers; Interregional trade and economic geography.
- Part II: Firms in the global economy 1: The theory of imperfect competition; Monopolistic competition and trade.

*Compulsory Reading Materials:*

- Krugman et al. (2018): Ch. 7
- *Krugman et al. (2018): Ch. 8*

**International Trade (P. Tomberger)**

*Topics:*

- Firms in the Global economy 2: The theory of imperfect competition; Monopolistic competition and trade; Firm responses to trade: winners, losers, and industry performance; Trade costs and export decisions; Dumping; Multinational and outsourcing; Foreign direct investment.

*Compulsory Reading Materials:*

- *Krugman et al. (2018): Ch. 8 (until "Trade Costs and Export Decisions")*

**International Trade (P. Tomberger)**

*Topics:*

- Part I: The instruments of trade policy: Basic tariff analysis; Costs and benefits of a tariff; Other instruments of trade policy.
- Part II: Trade theory applied to policy analysis 2
- Part III: Conclusions: Setting the theories discussed in class into perspective

*Reading Materials:*

- Krugman et al. (2018): Ch. 9
- Krugman, P. (2009): "The Increasing Returns Revolution in Trade and Geography", The American Economic Review, 99. 561—571.
- *Francois, J., van Meijl, H. and F. van Tongeren (2005): "Trade liberalization in the Doha Development Round, Economic Policy, April 2005. 349 – 391.*