

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN



# **Annex Module Handbook**

Master's Program: Economics (Master of Science, M.Sc.)

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# **Abbreviations and Explanations**

ECTS European Credit Transfer and Accumulation System

WP Elective Compulsory Module

The following provides information on selected courses for the modules WP1 – WP12, which are offered within the Master's degree program in Economics. This compilation is regularly updated, but may not be exhaustive, as the faculty's course offerings are continuously evolving.

No legal claim can be derived from the course information provided in this document.

# **Advanced International Trade**

Lecturer	Martina Magli, PhD
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### Contents

The course is designed for Master students interested in deepening their knowledge of International Economics. We will analyse both theoretical and empirical works, spanning from the milestone model of Ricardo to the advanced models exploring firms' heterogeneities (e.g. Melitz model). At the end of the course students will acquire the necessary tools to solve and critically understand the latest development of the International Trade literature. The course should also be a good base for those interested in pursuing a career in research.

### Course outline:

- 1. Ricardo, Hecksher-Ohlin and Multi-factor models.
- 2. Trade in Itermediates and Offshoring.
- 3. Geography of trade ("New" trade models and Gravity model)
- 4. "New new" trade models and gains from trade
- 5. Multinational firms
- 6. Trade, technology and growth

### Literature

The main text used in the course is available in the catalogue of the library and it is the following: Feenstra, R. C. (2016). Advanced international trade: theory and evidence. Princeton university press All papers cited in class are available on-line to all students through the University authentication system.

# Advanced Topics in Organizational Economics: From Theory to Real-World Impact

Lecturer	Prof. Dr. Florian Englmaier
Course Type & ECTS	Seminar / 12 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 1, WP 2, WP 7 or WP 8.

#### **Contents**

Gibbons and Roberts (2013) define organizational economics as "the use of economic logic and methods to understand the existence, nature, design, and performance of organizations, especially managed ones." In this seminar, we will explore cutting-edge research in organizational economics, focusing on areas such as information flows, skill development and shortages, and the impact of culture and leadership. Together, we will not only discuss the latest advancements in these areas but also apply this knowledge to tackle real-world challenges, similar to the case method approach, and develop (paths to) actionable solutions. If you are interested in intensely engaging with advanced research, contributing to in-depth discussions, and applying your insights to real-world organizational issues, this seminar will provide a valuable and challenging experience.

### Literature

Gibbons, R. & Roberts, J. (2013) "Handbook of Organizational Economics", Princeton University Press.

Bloom, N., Lemos, R., Sadun, R., Scur, D. & Van Reenen, J. (2014). "The new empirical economics of management." Journal of the European Economic Association, 12(4), pp. 835–76.

# **Applied (Macro-) Economics**

Lecturer	Ilka Gerhardts
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### **Contents**

This course discusses and implements intermediate to advanced econometric methods. Examples are mainly taken from (but not limited to) the field of Development Economics.

The goal of the course is to provide students with the necessary tools to put their own little research project into practice, that is 1) to develop a research idea 2) to get and clean the data, 3) to implement the analysis using R or Stata, and finally 4) to present their work step-by-step to the class.

- \*\*\* The special format of the course has 3 main implications: \*\*\*
- 1) Conducting real-world research (even on a small scale) is different from coding toy examples in class. Likely, students will face unforeseen difficulties that make you learn a lot while time investment is the price to pay. Thus, choosing this course is probably more time-consuming than a course finishing with a classical exam. However, this additional time investment makes sense for students interested in writing an empirical master's thesis or striving for an academic career in the long run.
- 2) If students want to take the course for grading early-on commitment is required (deadline: 2022/10/24, a few days after our introductory session with detailed information). New projects cannot be registered further into the semester. Firstly, executing a research project is time-consuming and sometimes stalled for reasons beyond your influence. Therefore, you need to start working on the project immediately. Secondly, only a limited number of projects can be supervised and presented over the course period. If the number of students exceeds these capacities, we will need to shorten project presentations and switch to a classical exam for grading. This (unlikely) switch would be communicated right after the deadline.
- 3) Students are expected to come up with and carry through their own research ideas, e.g., replicating and extending a peer-reviewed paper. However, these single-authored projects shall not be lonely processes! You are very welcome to raise general interest problems within classes. Moreover, please consult me after class to discuss specific issues from feasibility over early-stage obstacles up to alternative project ideas, coding bugs, etc.

Collaboration with classmates like bilateral feedback, etc. is very much recommended, too. While our moodle chat is yet another option to get support, students should be willing to participate in all sessions throughout the course period.

The 1st part of the course period is dedicated to acquiring theoretical and practical skills to employ core empirical methods. During the 2nd part, students present their own and comment on each other's research projects. Everyone hands in the presentation slides, the code, and the data.

# Literature

The structure of the course is adapted from Söderbom and Teal (2015). You can download the book for free and check its content here:

https://www.routledge.com/Empirical-Development-Economics/Soderbom-Teal-Eberhardt-Quinn-Zeitlin/p/book/9780415810494

To brush up on required econometric skills, Angrist and Pischke (2009) is recommended.

For practical implementation of your own research project, please consult Cameron and Trivedi (2010) and Heiss (2020).

Further references will be provided in due time over the course period.

# **Current Topics in Urban Economics**

Lecturer	Dr. Kalle Kappner
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

#### **Contents**

This lecture introduces students to central concepts, ideas and theories, as well as recent empirical studies in Urban Economics, the study of the economics of cities. The first 8 lectures focus on formal models, empirical methods and data analysis techniques. The last 4 lectures feature an in-depth discussion of recent papers that apply these theories and techniques. The corresponding tutorial sessions deepen the understanding of the lecture content through problem sets and discussions.

- Week 1: Introduction and stylized facts
- Week 2: The von Thünen model of land use
- Week 3: The Alonso-Muth-Mills and the monocentric city
- Week 4: Extensions to the Alonso-Muth-Mills model
- Week 5: The Rosen-Roback model and spatial equilibrium across cities
- Week 6: New Economic Geography approaches to spatial equilibrium
- Week 7: Polycentric Urban Models
- Week 8: Quantitative Urban Models
- Week 9: Liotta et Al (2022): "Testing the Monocentric Standard Urban Model in a Global Sample of Cities"
- Week 10: Becker et Al (2021): "The Impact of Public Employment: Evidence from Bonn"
- Week 11: Heblich et Al (2020): "The Making of the Modern Metropolis: Evidence from London"
- Week 12: Ahlfeldt et Al (2023): "Optimal Minimum Wages in Spatial Economies"

A firm understanding of graduate-level microeconomics is useful. Students with an interest in Applied Micro, Economic Geography and/or International Trade, and interest in GIS & spatial data analysis are especially welcome.

PhD students taking the class as a Doctoral Class will give a presentation on a published research paper in the very last session.

### Literature

See Brueckner (2011), Glaeser (2020) and Redding (2023) for a general flavour of the covered models, topics and questions.

Brueckner, J. (2011): Lectures on Urban Economics, MIT Press

Glaeser, E. (2020): "Equilibrium over Space: The Canonical Urban Models", lecture held at the UEA conference 2020, <a href="https://www.youtube.com/watch?v=zMmXo1nHetE">https://www.youtube.com/watch?v=zMmXo1nHetE</a>

Redding, S. (2023): "Quantitative Urban Models", The Journal of Economic Perspectives 37(2), 75-98

# **Empirical Industrial Organization**

Lecturer	Dr. Alessandra Allocca
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### Contents

This course provides a comprehensive introduction to structural estimation methods applied in Industrial Organization (IO). Empirical research in IO is made of several ingredients: theory, institutional background, datasets, econometric tools, and computer programming. We will study how previous researchers have combined these ingredients to answer relevant economic questions. This course does not intend to be an exhaustive review of the literature: we will cover a limited number of topics in some depth. Importantly, the methods we will discuss are also employed in other fields, such as innovation, health, trade, labor, development, and finance. Hence, the course will be useful for students planning to conduct research in empirical IO and students interested in understanding, evaluating, and designing structural estimation strategies more widely.

#### Literature

Aguirregabiria, V. (2021) "Empirical Industrial Organization: Models, Methods, and Applications," Book in Progress, Chapter 1.

Reiss P. and F. Wolak (2007). "Structural Econometric Modeling: Rationales and Examples from Industrial Organization," Handbook of Econometrics, Vol. 6A, Chapter 64, Sections 1-4.

# **Empirical Methods in International Public Finance**

Lecturer	Dr. Jakob Miethe
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### Contents

The goal of this course is to enable you to evaluate existing research and research proposals (of your colleagues) constructively but critically, develop you own research idea, and learn the necessary empirical skills to devise a promising research methodology. In order to do this, you will learn how to assess existing research, you will study the theory of current methodological approaches, learn how to process data in R using those same methods, and how to come up with your own research ideas and form them into a research proposal that you can present.

#### Literature

The content of the course will be organized around current applied and methodological papers taken directly from the literature that are referenced in each block. If you prefer a textbook, please refer to:

Wooldridge, Je\_rey. 2002 (1st edition) or 2010 (2nd edition). Econometric Analysis of Cross Section and Panel Data, MIT Press, Cambridge, MA.

# **Empirical Studies on Platforms**

Lecturer	Xuan Teng
Course Type & ECTS	Seminar / 12 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 1, WP 2, WP 7 or WP 8.

# Contents

This is a seminar on contemporary empirical studies on platforms. Topics covered include network externalities, multi-sidedness, platform mergers, exclusitivity, multihoming. Platforms turn out to be a useful perspective when studying payment cards, digital TV, Airbnb, Facebook, among other relevant contexts. The goal of this seminar is to learn about the research frontier in empirical studies on platforms, to become familiar with research methods, and to inspire research questions.

# Literature

Ho, K., Hortacsu, A. and Lizzeri, A., 2021. Handbook of industrial organization. Volume 4 and 5. Elsevier.

# **Epidemics in Economic History**

Lecturer	Kalle Kappner
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### Contents

How did historic epidemics shape production and consumption patterns, socioeconomic inequality and labour relations, both in the short and the long run? Did economic development, globalization and urbanization support a slow but steady conquest of infectious diseases, or was their role rather to expose societies to new risks? And what policy lessons can we learn from studying the economic impact of the bubonic plague, cholera, influenza and other scourges of humanity? This seminar introduces students to recent research on the economic history of epidemics, infectious disease and health, with an emphasis on quantitative, empirical evidence.

# Literature

The full syllabus is available at https://drive.google.com/file/d/18vFB2fUuF5GYmGHoptatLCkvkYdCIMh\_/view?usp=sharing

# **Globalization and Innovation**

Lecturer	Prof. Claudia Steinwender
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

#### **Contents**

In this challenging course we will learn and discuss topics at the intersection of innovation and globalization — two areas that in Economics are typically studied separately.

However, in today's world innovation and globalization are tightly linked: Technological innovation spreads globally and has global impacts, and globalization is often the driver for innovation. At the same time, we have witnessed rapid developments in both globalization and technological change over the past few decades. The world has never been more integrated with respect to trade, foreign direct investment and technology. More specifically, we will study three important questions in this course:

# 1. How does globalization affect innovation?

In this part of the course we first discuss the mechanisms that may generate innovation in response to a variety of globalization shocks (e.g., access to export markets, access to imported inputs, import competition). Then the course will teach you how to empirically estimate the effect of globalization shocks on innovation and productivity using firm-level data.

- 2. What is the role of technological change to alleviate climate change driven by globalization? In this part of the course we first discuss the channels through which globalization may affect pollution, taking into account innovation responses. We study the decomposition of emission increases into scale, composition, and technique effects, and learn how to estimate the importance of the different components in response to a change in trade or environmental policy.
- 3. How did important historical innovations affect globalization?

The final part of the course studies historical innovations that contributed to globalization, such as open sea sailing, the telegraph, canals and steam ships, containerization, airplanes, and the internet. We will discuss how these technologies affected firms and consumers, which frictions they addressed, and how much they contributed to economic growth.

Overall, we will compare and critically evaluate identification strategies used in a selection of important papers in these areas, and develop our critical thinking skills in discussions, problem sets, and group discussions.

Furthermore, the course will teach the use of Stata, and students will use Stata to analyze, replicate and criticize a number of selected paper. This will include a small data project to teach students how to conduct their own data analysis in their further academic work.

#### Literature

Amiti, M. and J. Konings (2007). Trade Liberalization, Intermediate Inputs, and Productivity: Evidence from Indonesia. American Economic Review 97 (5), 1611–1638.

Atkin, D., A. K. Khandelwal, and A. Osman (2017, May). Exporting and Firm Performance: Evidence from a Randomized Experiment. The Quarterly Journal of Economics 132 (2), 551–615.

Autor, D., D. Dorn, G. H. Hanson, G. Pisano, and P. Shu (2017, December). ForeignCompetition and Domestic Innovation: Evidence from U.S. Patents. NBER WorkingPaper No. 22879.

Bakker, J. D., S. Maurer, J.-S. Pischke, and F. Rauch (2021). Of mice and merchants: Connectedness and the location of economic activity in the iron age. Review of Economics & Statistics 103 (4), 652 – 665.

Bloom, N., M. Draca, and J. van Reenen (2016, January). Trade Induced Technical Change? The Impact of Chinese Imports on Innovation, IT and Productivity. The Review of Economic Studies 83 (1), 87–117.

Bombardini, M. and B. Li (2020). Trade, pollution and mortality in China. Journal of International Economics 125, 103321.

Cherniwchan, J. (2017). Trade liberalization and the environment: Evidence from NAFTA and U.S. manufacturing. Journal of International Economics 105, 130–149.

Coelli, F., A. Moxnes, and K. H. Ulltveit-Moe (2020). Better, Faster, Stronger: Global Innovation and Trade Liberalization. Working Paper.

Copeland, B. R., J. S. Shapiro, and M. S. Taylor (2021, May). Globalization and the environment. Working Paper 28797, National Bureau of Economic Research.

Feyrer, J. (2019, October). Trade and income—exploiting time series in geography. American Economic Journal: Applied Economics 11 (4), 1–35.

Goldberg, P. K., A. K. Khandelwal, N. Pavcnik, and P. Topalova (2010, November). Imported Intermediate Inputs and Domestic Product Growth: Evidence from India. The Quarterly Journal of Economics 125 (4), 1727–1767.

Guti'errez, E. and K. Teshima (2018). Abatement expenditures, technology choice, and environmental performance: Evidence from firm responses to import competition in Mexico. Journal of Development Economics 133, 264–274.

Pascali, L. (2017). The wind of change: Maritime technology, trade, and economic development. American Economic Review 107 (9), 2821–54.

Shu, P. and C. Steinwender (2018, June). The Impact of Trade Liberalization on Firm Productivity and Innovation, pp. 39–68. University of Chicago Press.

# **Incomplete Markets**

Lecturer	Christopher Busch
Course Type & ECTS	Seminar / 12 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 1, WP 2, WP 7 or WP 8.

#### **Contents**

The seminar deals with questions pertaining to distributional aspects in macroeconomics. The focus will be on quantitative models, in particular, the goal is to make students familiar with the standard incomplete markets model framework a la Bewley-Huggett-Aiyagari-Imrohoroglu.

In those models' households face a risky stream of income (or productivity) and can only partly insure against the idiosyncratic risk they face by means of savings in a risk-free asset. The model framework is at the core of quantitative models in modern macroeconomics with individual-level heterogeneity

Building on the foundational knowledge of the core model framework, students will deal with topics covering:

- Income and wealth inequality
- Individual-level risk and its dynamics over the life cycle and the business cycle
- Taxation and fiscal policy in the presence of individual heterogeneity
- Consequences of individual heterogeneity for aggregate outcomes

Term papers will be based on original research articles, which students will (critically) assess, and potentially expand on.

#### Literature

Ljungqvist, Lars and Thomas J. Sargent: Recursive Macroeconomic Theory; 4th Edition. MIT Press, 2018; [in particular chapters 3, 17, 18].

Core papers introducing the Standard Incomplete Markets Model:

Aiyagari, S., (1994): "Uninsured Idiosyncratic Risk and Aggregate Saving," The Quarterly Journal of Economics, 109(3), pp. 659-684.

Huggett, Mark, (1993): "The risk-free rate in heterogeneous-agent incomplete-insurance economies," Journal of Economic Dynamics and Control, 17(5-6), pp. 953-969.

İmrohoroğlu, Ayse, (1989): "Cost of Business Cycles with Indivisibilities and Liquidity Constraints," Journal of Political Economy, 97(6), pp. 1364-83.

Krusell, Per, and Anthony A. Smith, Jr. (1998): "Income and Wealth Heterogeneity in the Macroeconomy," Journal of Political Economy, 106(5), pp. 867–96.

Kaplan, G. and Violante, G.L. (2014): "A Model of the Consumption Response to Fiscal Stimulus Payments," Econometrica, 82, pp. 1199-1239.

The term papers will be based on a set of (recent) articles.

# **International Public Economics**

Lecturer	Kai Konrad
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### **Contents**

The strengthened internationalization of modern economies constitutes a new framework to public spending and revenue policies, creating new challenges for policy makers. This course analyses the incentives for and effects of state actions in an international setting. Topics include, among others, the theory of tariffs, strategic trade policy, tax competition, and further cooperative and non-cooperative interactions between countries that affect public finances.

# 1. Theory of tariffs

- a. Incidence of import tariffs, and optimal tariffs and tariff war
- b. Political economy of tariffs
- c. Strategic trade policy
- 2. International public goods
  - a. Non-cooperative and cooperative provision of international public goods
  - b. Applications in the field of international climate policy

# 3. Tax competition

- a. Tax competition between welfare states
- b. Tax competition and political economy
- 4. Commitment problems of sovereigns
  - a. Sovereign debt and default
  - b. Foreign direct investment and expropriation

# Literature

Brander, James A., 1995. Strategic Trade Policy, in: Gene M. Grossman and Kenneth Rogoff (Eds.), Handbook of International Economics, Vol. 3, Chapter 27. Elsevier, Amsterdam, 1395-1455.

Feenstra, Robert C., 2004. Advanced International Trade, Chapter 7. Princeton University Press, Princeton, 209-253.

Hoel, Michael, 1991. Global Environmental Problems - The Effects of Unilateral Actions Taken by One Country. Journal of Environmental Economics and Management 20(1), 55-70.

Huck, Steffen, and Kai A. Konrad, 2004. Merger Profitability and Trade Policy. Scandinavian Journal of Economics 106(1), 107-122.

Keen, Michael, and Kai A. Konrad, 2014. The Theory of International Tax Competition and Tax Coordination, in: Alan J. Auerbach, Raj Chetty, Martin Feldstein, and Emmanuel Saez (Eds.), Handbook of Public Economics, Vol. 5, Chapter 5. North-Holland, Amsterdam, 257-328.

# **Microeconometrics & Machine Learning**

Lecturer	Prof. Dr. Derya Uysal
Course Type & ECTS	Seminar / 12 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 1, WP 2, WP 7 or WP 8.

### Contents

This course combines microeconometric techniques with modern machine learning methods, equipping students with advanced tools to handle large datasets and conduct rigorous causal analysis. The seminar is divided into a teaching part and a seminar part. In the teaching part, students will attend four half-day sessions. The course will cover essential techniques such as variable selection and cross-validation, as well as shrinkage methods like ridge, lasso, and elastic net. We will also explore classification methods, including logit and k-nearest neighbors (k-nn). Additionally, the course will address the use of lasso in causal inference contexts with many controls and instrumental variables, providing students with tools for more robust causal estimates. In the second part, students will write their seminar papers on either a theoretical topic, an application of the methods discussed in the course, or other related machine learning methods.

#### Literature

<sup>&</sup>quot;Microeconometrics: Methods and Applications" by A. Colin Cameron and Pravin K. Trivedi

<sup>&</sup>quot;An Introduction to Statistical Learning" by Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani

# **Monetary Economics**

Lecturer	Dr. Peter Zorn
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### **Contents**

This course studies the effects of monetary policy on the real economy. We start with a discussion of identification and estimation of causal effects in macroeconomics. After considering the evidence for monetary non-neutrality, the course introduces the New Keynesian Model. We then turn to menu cost models and the Heterogeneous Agent New Keynesian (HANK) model, which relax key assumptions of the New Keynesian Model. Lastly, the course presents current research on the transmission channels of monetary policy through firm balance sheets, redistribution, and mortgage markets. Along the way, we will build the essential tools to start thinking about these issues, including vectorautoregressions, local projections, dynamic programming, recursive competitive equilibrium, and incomplete market economies.

#### Literature

No required textbook. Parts of the material covered by:

Galí, J. (2015): Monetary Policy, Inflation, and the Business Cycle, Princeton University Press.

Niepelt, D. (2019): Macroeconomic Analysis, MIT Press.

Additional readings will be provided at the beginning of the course.

# **Social Preferences at Workplace**

Lecturer	Anik Ashraf, PhD
Course Type & ECTS	Seminar / 12 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 1, WP 2, WP 7 or WP 8.

# **Contents**

The aim of this seminar will be to discuss some fundamental and recent topics related to social prferences that workers exihibit at workplaces. Students will be expected to read a number of papers in the field and discuss these papers during the seminar dates. We will be discussing both theoretical and empirical papers. At the end of the seminar course you will have seen, discussed, and formed an understanding of some of the most important issues on the topics.

We will be building on Master level knowledge in Microeconomics and Econometrics. Familiarity with principal agent theory and game theory will be helpful.

### Literature

Robert Gibbons (Editor), John Roberts (Editor) (2012) "The Handbook of Organizational Economics," Princeton University Press

# **Tax Policy and Multinational Firms**

Lecturer	Prof. Andreas Haufler
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

### **Contents**

This course analyzes the strategic choices of multinational firms with respect to the international tax environment, and the responses of governments to limit international tax arbitrage. It introduces students to the recent theoretical and empirical research on tax policy towards multinational firms, covering both the real investment decisions (FDI) and the profit-shifting decisions of multinationals. Along the way, the institutional setup for the taxation of multinational firms will be introduced. Current policy proposals such as the OECD's "Base erosion and profit shifting" (BEPS) initiative and the Global Minimum Tax are also discussed.

# Literature

Devereux, M., Loretz, S. (2013). What do we know about corporate tax competition? National Tax Journal 66(3), 745-773.

Keen, M., Konrad, K. (2013). The theory of international tax competition and coordination. Handbook of Public Economics, Volume 5, Ch. 5, 257-328.

# **Tax Policy and Multinational Firms**

Lecturer	Prof. Andreas Haufler
Course Type & ECTS	Seminar / 12 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 1, WP 2, WP 7 or WP 8.

### **Contents**

The fact that many large, multinational firms pay very little corporate taxes has led to several recent policy initiatives, such as the OECD's base-erosion-and-profit shifting measures, or the introduction of a Global Minimum Tax. In this seminar we cover the location, investment, financing and profit-shifting decisions that multinational firms can take to reduce their global tax burden. We then look at various government policies that aim to enforce corporate taxes on multinationals firms, both at the national and at the supranational level.

The course will introduce students to this active research field in a series of lectures that are blocked in the first weeks of the summer term. With this background, students then write their term papers. The course concludes with the blocked seminar in which students present their term papers and discuss its policy implications. The topics for the term papers are drawn from recent publications in leading international journals and cover both theoretical and empirical work.

#### Literature

Devereux, M., Loretz, S. (2013). What do we know about corporate tax competition? National Tax Journal 66(3), 745-773.

Keen, M., Konrad, K. (2013): The theory of international tax competition and coordination. Handbook of Public Economics, Vol. 5, Ch. 5, 257-325.

# The Economics of Climate Change and Climate Policy

Lecturer	Karen Pittel and Valeriya Azarova
Course Type & ECTS	Lecture & Tutorial / 6 ECTS
Teaching Language	English
Module Assignment	This course can be selected for module WP 3 – WP 6 or WP 9 – WP 12.

#### **Contents**

In the wake of the latest climate assessment report of the Intergovernmental Panel on Climate Change (IPPC), the urgency to combat rising temperatures is felt more acutely than ever. But climate change also poses one of the biggest long-term challenges for economists: Climate change itself is a global commons and efforts to mitigate greenhouse gas emissions are essentially global public goods. The lecture aims at improving the understanding of how economists address climate change theoretically and empirically. It introduces some of the most important topics climate economists work on:

- How should carbon emissions and, more general, the environment be valued using the economists' toolkit?
- How can the interaction between climate and the economy be captured in economic models?
- What role does discounting play for policy advice and what discout rate is correct?
- What fundamentals drive the speed at which fossil energy resources are extracted?
- Given the multitude of policy instruments at the disposal of politicians, which ones hold the most promise of successfully curbing emissions?
- 1. Introduction
- 2. Some Basics of Public Economics
- 3. Economic Valuation of the Environment
- 4. Climate-Economy Modelling
- 5. Discounting
- 6. Supply of Fossil Energy Resources
- 7. Climate Policy Instruments
- 8. Climate Policy Valuation Methods

# Literature

Perman, R. et al. (2011), Natural Resource and Environmental Economics, 4th ed. Harlow: Pearson.

Tol, Richard S.J. (2019) Climate Economics: Economic Analysis of Climate, Climate Change and Climate Policy, 2nd ed., Cheltenham, UK: Edward Elgar.

Phaneuf, D. J., & Requate, T. (2016). A course in environmental economics: theory, policy, and practice. Cambridge University Press.

Further references will be provided in the course of the lecture.