

Annotated Course Catalog for courses held in English language

Fall Semester 2024, B.Sc. Economics

Changes and updates are published in a separate file: <https://www.vwl.uni-mannheim.de/en/academics/bscin-economics/course-catalog/>

Please note that there was a single week to register for seminars in the Bachelor program (27 May until 3 June 2024). Changing or cancelling seminar registrations was only possible in the first week after the registration period.

All courses marked with *** are suitable for German students in their third semester or international students with equivalent level of knowledge.

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Introductory Phase

Macroeconomics B

Responsible teacher of the module: Prof. Ana Moreno-Maldonado, Ph.D.

Further instructors: teaching assistants for exercise classes

Cycle of offer: each fall semester

ECTS credits: 8

Teaching method (hours per week): lecture (3) and practical exercise (2)

Course language: English

Prerequisites: we will draw heavily on the contents of the courses Analysis and Microeconomics A, Macroeconomics A recommended

Grading: written exam (120 minutes)

[Schedule lecture](#) / [schedule exercises](#)

Goals and contents of the module: This course offers a micro-founded introduction to modern macro models of the business cycle, including a mathematical derivation of these models. The course will cover macroeconomic models of short run fluctuations (IS-LM, AS-AD, Phillips-curve). In addition, the effects of monetary and fiscal policy on output, unemployment and inflation will be studied. Further, the theory and welfare implications of inflation and time inconsistency of policy decision are discussed.

Topics:

- A one-period model of the macro economy
- Savings and investment
- Money and business cycles
- Topics in banking

Expected competences acquired after completion of the module: The students can quantitatively estimate the effects of policy decision on macroeconomic outcomes. The presented models are also a useful guide to inform macroeconomic debates.

Further information: Literature: Williamson, S. (2018). Macroeconomics (Sixth edition, global ed., The Pearson series in economics). Harlow, England.

There is also an independent German version of Macro B. Both courses cover essentially the same material and adopt the same book. Moreover, the exercise sessions on both languages will discuss the same problem sets. However, organizational details and grading will be determined by each instructor.

Contact Information: Prof. Ana Moreno-Maldonado, Ph.D., e-mail: ana.moreno@uni-mannheim.de

Responsible teacher of the module: Prof. Helena Perrone, Ph.D.

Further instructors: teaching assistants for exercise classes

Cycle of offer: each fall semester

ECTS credits: 8

Teaching method (hours per week): lecture (3) + exercise class (2)

Course language: English

Prerequisites: Grundlagen der Volkswirtschaftslehre, Microeconomics A

Grading: final exam, 120 min

[Schedule lecture](#) / [schedule exercises](#)

Goals and contents of the module: This course covers sources of market failure and provides an introduction into game theory and information economics. Starting with the two welfare theorems established in Microeconomics A, the course is organized around the limitations of these theorems. In the first two parts, which are covered rather quickly, external effects and public goods are analyzed. These topics are further developed in the courses Wirtschaftspolitik and Finanzwissenschaft. In the third part of the course market power is analyzed, both in a monopoly and an oligopoly context. In addition to standard monopoly and oligopoly theory, the course elaborates on price discrimination and bundling in monopoly and on dynamic aspects of competition such as deterrence. This part also contains an introduction into non-cooperative game theory with a particular focus on the knowledge foundation of games. Solution concepts are developed and discussed. The fourth part of the course addresses asymmetric information as a source of market failure. This part is an introduction into information economics and game theory under asymmetric information. This part begins with adverse selection problems and then covers screening and signaling. It then turns to moral hazard in a principal-agent relationship. This course provides basic tools and economic mechanisms that not only play an important role in microeconomics, but also are relevant across different economic sub disciplines. The focus is on the basic mechanism and not on formal apparatus. Lectures are complemented by incentivized classroom experiments (included in the lecture) and exercise sessions.

Expected competences acquired after completion of the module: The student is acquainted with basic concepts of microeconomic theory complementing the course Microeconomics A. In particular, the student is able to use concepts from game theory and information economics to address economic questions. Apart from being able to apply formal tools to a large variety of real-world issues, the student has learnt to choose the appropriate solution concepts and modeling tools for the question of interest. Thus, the student is able to evaluate what is the appropriate model and synthesize his knowledge by focusing on the fundamental economic mechanism at work. The student has improved communication skills through active participation in particular in the exercise sessions.

Further information:

- Main textbook: Pindyck, R., & Rubinfeld, D. (2018). Microeconomics (Ninth edition, global ed., The Pearson series in economics).
- Optional textbook: Varian, H. (2014). Intermediate Microeconomics: A modern approach (Ninth edition, international student ed.).

Contact Prof. Helena Perrone, Ph.D.; e-mail: helena.perrone@uni-mannheim.de

Advanced Phase Lectures

Applied Economics

Responsible teacher of the module: Prof. Philipp Ager, Ph.D.

Cycle of offer: each fall semester

ECTS credits: 6 or 7

6 ECTS for 1 hour per week exercise and 7 ECTS for 2 hours per week exercise

Teaching method (hours per week): lecture (2) and exercise (1 or 2)

Course language: English

Prerequisites: Statistik I + II, Grundlagen der Ökonometrie

Grading: final exam (120 min, 100%) for students enrolled for 6 ECTS / final exam (120 min, 80%) and presentations (20 min, 20%) for students enrolled for 7 ECTS

[Schedule](#)

Goals and contents of the module: The course introduces three main empirical strategies that are used in applied work to establish causality: difference-in-differences, event-study designs, and instrumental variables. For example, in applied microeconomics, the number of papers in top-5 economics journals with explicit reference to identification has increased from less than 5% at the beginning of the 1980s to around 50% as of today. In these outlets, the use of difference-in-differences and event studies in applied work gained in popularity over the last 10 years complementing traditional methods such as instrumental variables and fixed effects models.

Exercise: compulsory exercise session (1), we will learn to apply every method, discuss common pitfalls that applied researchers might encounter, and provide potential remedies based on recent advances in the field.

Optional exercise session (2): students (in groups of 3) must present a research article. The list of articles for the presentation sessions will be handed out at the beginning of the semester. The students must pick one of the papers on the list, which will be allocated on a first come and first served basis. The presentation should be 20 minutes long, containing a detailed summary of the presented article (60% of the presentation) and a critical evaluation (40%). The presentation will take place on one day at the end of the semester.

Expected competencies acquired after completion of the course: Students understand the empirical methods learned in class, know their potential pitfalls and remedies how to solve/circumvent them. Students learn how to implement the empirical methods covered in class and they are able to critically evaluate research papers using these methods.

Further information: Useful background material:

- Angrist J. and Pischke, J. (2009): Mostly Harmless Econometrics: An Empiricist's Companion
- Scott Cunningham (2021): Causal Inference: The Mixtape

Contact Information: Prof. Philipp Ager, PhD; E-mail: philipp.ager@uni-mannheim.de

Applied Multivariate Statistics (AMS)

Responsible teacher of the module: Dr. Toni Stocker

Cycle of offer: each fall semester

ECTS credits: 8

Teaching method (hours per week): lecture (2) + exercise (3)

Course language: English

Prerequisites: Basic Statistics, Basic Econometrics OR Linear Algebra, Laptop required

Grading: final written exam (120 minutes, 80 %) + homework assignments to submit plus cooperative learning in tutorials during the semester (20 %). There are 13 exercise sheets spread over the semester, each with 4-8 tasks.

Achieving a minimum of points in the homework gradings is required for participating in the exam (please check the course guidelines for details). The final grade is based on points from the tutorials and points from the final written exam. At maximum, there are 100 points to earn, where 20 points are from the tutorials and 80 points from the written exam.

[Schedule](#)

Goals and contents of the module: Subject of this course is to provide an overview about classical methods for describing and analyzing high-dimensional data. Thereby the main focus is on their practical application. The Statistical Software R will intensively be used throughout the course and also in the final exam. Contents: Introduction to AMS, Matrix Algebra, Multivariate Samples, Principal Component Analysis (PCA), Biplots, Factor Analysis, Multidimensional Scaling (MDS), Cluster Analysis, Linear Discriminant Analysis (LDA), Binary Response Models, Statistical Methods for Data Science

Expected competences acquired after completion of the module: At the end of the semester students know and understand most common methods for analyzing multivariate data and their theoretical background can proficiently use R when using multivariate techniques: data import, constructing graphics, inference, model diagnosis and assessment have experienced the possibilities and limitations of multivariate methods on the basis of real data examples

Further information: Students should have a solid background in Statistics (e.g., two or more courses in Statistics). A course in Basic Econometrics is helpful but not strictly required. The course should be attended from the first session. Entering the course later is strongly discouraged.

Contact Information: Dr. Toni Stocker; phone: +49 621 181 3963; e-mail: stocker(at)uni-mannheim.de; office: L7,3-5; 1st floor, room 143; office hours: Wednesday, 3:00-4:30 p.m. or upon appointment.

Economics of European Integration

Responsible teacher of the module: Prof. Dr. Eckhard Janeba

Cycle of offer: irregular

ECTS credits: 7

Teaching method (hours per week): lecture (3)

Course language: English

Prerequisites: Finanzwissenschaft, Wirtschaftspolitik; recommended: Internationale Ökonomik (for international students: basic knowledge in microeconomics and macroeconomics)

Grading: final exam (90 min, 100%)

[Schedule](#)

Goals and contents of the module: The course provides an introduction into the economic and political aspects of integration in the European Union. It covers a variety of fields including the historical development of the EU integration process, the integration of product (trade in goods and services) and factor markets (FDI and migration), the governance structures in the EU, as well as the monetary integration and fiscal coordination process. Current policy issues such as Brexit or the reform of institutional structures are addressed.

Expected competences acquired after completion of the module: Students will learn to understand core ideas and key problems of the European integration process and be able to apply their knowledge and understanding in existing but also new situations as the European integration process moves on. Students will also learn theoretical and empirical methodologies used in the current research of this area. This includes the knowledge of major sources of data and documents from EU websites and other sources relating to the EU.

Contact Information: Prof. Dr. Eckhard Janeba; phone: (0621) 181-1795; email: janeba@uni-mannheim.de; office: L7, 3-5, room 2.29; office hours: by appointment.

Economics of Social Insurance and Social Policies

Responsible teacher: Prof. Arthur Seibold, Ph.D.

Cycle of offer: each fall semester

ECTS credits: 5

Method (hours per week): lecture (2)

Course language: English

Prerequisites: introductory classes in Microeconomics and Econometrics; having taken Introductory Public Economics is desirable

Grading: final exam (90 min, 100%)

[Schedule](#)

Goals and contents of the module: This course offers an introduction to the economics of Social Insurance and other public social expenditure policies. The first part focuses on social insurance, including unemployment insurance, health insurance and retirement pensions. The second part deals with other social expenditure policies, including education and low-income transfers.

The course discusses the rationales for government intervention in different areas, as well as potential problems associated with it. Students will become familiar with recent empirical evidence on individual behavioral responses as well as the effectiveness of different government policies.

Expected competences acquired after completion of the module: By the end of the course, students should be able to:

- Critically analyze government intervention based on theoretical reasoning and empirical evidence
- Apply microeconomic methods to the area of social insurance and social policies
- Critically evaluate empirical evidence based on their knowledge of econometrics
- Have an understanding of the topics covered corresponding to recent research, and usefully apply this to real-world issues in public policy

Contact Information: Prof. Arthur Seibold, Ph.D.; Phone: +49 621 181-1781; E-mail: seibold(at)uni-mannheim.de; L 7, 3-5 - Room 224; Consultation hour(s): Wed, 5 - 6 p.m.

Financial Economics

Responsible teacher of the module: Celine Fei, Ph.D.

Cycle of offer: once per academic year

ECTS credits: 8

Teaching method (hours per week): lecture (3) + exercise (1)

Course language: English

Prerequisites: Microeconomics A + B

Grading: 100% final exam (120 min)

[Schedule](#)

Goals and contents of the module: This course introduces basic tools to understand financial economics. The introduction provides a brief description of basic securities like bonds and stocks, and of the functioning of financial markets.

The first part of the courses focuses on how an investor should optimally design a financial portfolio in order to diversify risk and derives one of the most influential asset pricing method: the Capital Asset Pricing Method (CAPM). The second part of the course deals with corporate finance. It presents the Modigliani-Miller theorem and turns to the analysis of the trade-off theory, which assesses the relative benefits of debt and equity. The final part of the course is about corporate financing under asymmetric information, in particular in the presence of moral hazard. Please note that this builds on and hence requires knowledge of game theoretic concepts as covered in Microeconomics B.

Expected competences acquired after completion of the module: Students acquire a broad knowledge about important concepts related to financial economics. Amongst other things, they understand how efficient portfolios are constructed, the pecking order theory, and the determinants of borrowing capacity. They are able to apply these concepts to a multitude of scenarios and can synthesize these considerations to for example discuss the advantages and disadvantages, which affect a company's optimal choice of the debt-to-equity ratio or leverage. They are able to understand the theoretical foundations underpinning the results and can critically discuss the underlying assumptions and resulting implications.

This provides students with the foundation to further their studies in fields related to Financial Economics and allows them to self-study more advanced material or research articles. The concepts discussed in the course have broad applicability in the workspace, be it within the financial sector itself, or in other sectors such as management consulting. More generally, the course teaches and promotes analytical thinking which is essential and helpful regardless of future career choices. The course also teaches students to clearly express their thoughts both to specialist and non-specialist audiences.

Contact: tba

Game Theory

Responsible teacher of the module: Prof. Dr. Thomas Tröger

Cycle of offer: irregular

ECTS-Credits: 7

Teaching method (hours per week): lecture (2) and exercise (2)

Course language: English

Prerequisites: Microeconomics A and Microeconomics B or equivalent

Grading: final exam (90 min)

[Schedule](#)

Goals and Contents: The goal of this course is to convey advanced methods of strategic interactions, building on the fundamental methods obtained in Microeconomics B. We begin by defining games and solution concepts. These will be practiced in applications from various areas of economics. The technical aspects will be trained in particular in the tutorials. The course consists of 5 parts: (I) Bayesian Games (II) Extensive Games (III) Evolutionary Games (IV) Repeated Games (V) Coalitional Games.

Expected Competences: In learning this cross-sectional subject, the students have obtained in particular methodological knowledge. This knowledge enables them to analyze strategic interactions.

They distinguish the most important non-cooperative and cooperative solution concepts with respect to their domains of applicability. They are able to use these concepts in order to compute solutions to concrete games of appropriate difficulty. In addition, successful participants can read scientific literature and articles of appropriate difficulty insofar game-theoretic methods are applied.

Textbook: Martin Osborne, "An Introduction to Game Theory"

Contact information: Prof. Dr. Thomas Tröger, e-mail: thomas.troeger@uni-mannheim.de

Responsible teacher of the module: Prof. Nicolas Schutz, Ph.D.

Cycle of offer: every fall term

ECTS credits: 6

Teaching method (hours per week): lecture (2) + practical exercise (1)

Course language: English

Prerequisites: Microeconomics A and B

Grading: written exam, 90 minutes

[Schedule](#)

Goals and contents of the module: In a market economy, firms are in charge of deciding what and how much to produce, and consumers respond to this by shopping for the best alternative. This course analyzes the behavior of firms. It aims to answer the following questions: What is a firm? What defines the boundaries of a firm? Given established boundaries, how do firms make production decisions and how do they compete with each other? Should government meddle with the operation of firms?

The course is organized as follows:

1. Review on perfect competition
2. Review on game theory
3. Monopoly
4. Static oligopoly
5. Dynamic oligopoly and collusion
6. Product differentiation
7. Information
8. Advertising
9. Merger, entry, and market structure
10. Network effects
11. Vertical relations
12. Patents and R&D
13. Antitrust

Expected competences acquired after completion of the module: Students acquire a broad knowledge in the field of industrial organization. They understand, among others, why monopolies harm social welfare, why price discrimination may benefit final consumers, why firms have incentives to escape the so-called Bertrand paradox, why collusion becomes harder to sustain in a shrinking industry, why firms have incentives to differentiate themselves as much as possible from their competitors, etc.

To deal with these issues, and to solve the relevant theoretical models, students apply various game theoretical and mathematical tools, such as optimization methods and multivariate calculus. Students should not mindlessly memorize the theories presented in this course, but rather understand where the models come from, and why they have been developed. They will understand the limitations of these theories, and how these limitations can be overcome. The focus on model-building, and not on mindless memorization, will enable students to deepen their knowledge in the field of industrial organization if they need to do so.

In particular, students will be able to teach themselves theories which are not dealt with in this course, or to read more advanced research articles.

The field of industrial organization has a lot of real-world applications. For instance, a graduate working in an antitrust authority will be able to apply monopoly, oligopoly, and cartel theory, when deciding whether to clear a horizontal merger. A graduate working for a management consulting firm, or for any corporation, will be able to apply industrial organization theory to pricing strategy. More generally, this course promotes strategic, analytical, and critical thinking, which is crucial in any professional career. Graduates are able to apply industrial organization theory to real world situations. For instance, when conducting a market analysis, they are able to identify what are the most important characteristics of this specific market. What are the available technologies? Are they likely to evolve in the near future? Is there a scope for product differentiation? Is entry likely to occur in the short run? In the longer run? The field of industrial organization uses analytical and quantitative tools. Theories are formulated using formal, mathematical models.

However, as already pointed out, graduates should not only be able to solve these models mathematically, but also to understand the intuition at work. Importantly, students are expected to be able to state this intuition in words. Therefore, graduates will be able to exchange information, ideas, and solutions both with experts of the field (using models, maths, and jargon) and with laymen (in plain English). Finally, this course is taught in English, and graduates therefore acquire a profound knowledge of the English terminology in the field of industrial organization.

Contact Information: Prof. Nicolas Schutz, Ph.D., E-Mail: schutz@uni-mannheim.de, L7, 3-5, room 310, Tel. 181-1872, Office hours: Monday, 2:15 pm to 4:15 pm.

Internationale Ökonomik***

Responsible teacher of the module: Dr. Jan Simon Schymik

Further instructor(s): teaching assistants for exercise classes.

Cycle of offer: each fall semester

ECTS credits: 6

Teaching method (hours per week): lecture (2) and practical exercise (2)

Course language: English

Prerequisites: Microeconomics A, Macroeconomics A

Grading: written exam (90 minutes)

[Schedule lecture](#) / [schedule exercises](#)

Goals and contents of the module: The course gives an introduction to international economics. The covered material corresponds to the international standard for a course in international economics.

The first half of the course covers core models of international trade, such as classical theories of comparative advantage (Ricardo and Heckscher-Ohlin) and trade models with scale economies (Krugman), and fundamentals of trade policy and the World Trade Organization. The second half of the course covers international macroeconomics. We will discuss the intertemporal approach to the current account, international capital flows, exchange rates, fiscal and monetary policy in open economies.

1. International Trade

- Introduction and facts about international trade
- The Ricardian model of international trade
- The Heckscher-Ohlin model
- Trade models with imperfect competition
- Trade policy and the WTO
- Foreign direct investment (FDI) and offshoring

2. International Macroeconomics

- The balance of payments
- Theories of international financial flows and the current account
- Short-run theories of exchange rates
- Long-run theories of exchange rates
- Fiscal and monetary policy in open economies
- Sovereign debt crises/exchange rate crises

Expected competences acquired after completion of the module: The student is acquainted with the core theories in international economics, as well as basic knowledge of the relevant international institutions. The student has learned to analyze and evaluate questions in international economics independently. The ability to analyze complex situations using analytical tools and logical thinking is increased.

Further information: Literature:

- Feenstra and Taylor (2011), International Economics, Second Edition, Worth Publishers.
- Schmitt-Grohe and Uribe: International Macroeconomics, Lecture Notes, Duke University.
- Krugman, Obstfeld und Melitz (2014): International Economics, 10th Edition, Pearson.

Contact Information: Dr. Jan Simon Schymik, L 7, 3-5 - room 4.17, phone: +49 621 181-3426, e-mail: jan.schymik@uni-mannheim.de

Microeconometrics

Responsible teacher of the module: Prof. Yoshiyasu Rai, Ph.D.

Cycle of offer: fall term

ECTS credits: 6

Teaching method (hours per week): lecture (2) + exercise (1)

Course language: English

Prerequisites: Statistik I + II und Grundlagen der Ökonometrie

Grading: final exam (120 min, 70%) + assignments (30%)

[Schedule](#)

Goals and contents of the module: The purpose of this module is to provide an introduction to modern microeconometrics - the statistical methods that economists use to analyze microlevel data. This module is primarily designed for Bachelor students who already have some background knowledge in econometrics and would like to learn more econometric tools and theories. We will cover various topics including OLS; Cluster data models; Causal inference as well as other topics.

Expected competences acquired after completion of the module: Upon course completion, students will be able to understand microeconomic methods that are used in applied econometric papers. They will also be able to apply these microeconomic methods for their own project. In addition to that, students will acquire knowledge of theoretical foundations behind these methods.

Further information: References used for this course are:

- Bruce E. Hansen (2022), Probability and Statistics for Economists, Princeton University Press.
- Scott Cunningham (2021), Causal Inference The Mixtape, Yale University Press.
- Joshua D. Angrist and Jorn-Steffen Pischke (2014), Mastering 'Metrics, Princeton University Press.

Contact Information: Name Yoshiyasu Rai, Phone: +49 621 181-1930, email: yrai(at)mail.uni-mannheim.de, Office: L7, 3-5 – Room 1.45, Office hours: By appointment.

Monetary Economics

Responsible teachers of the module: Philipp Wangner, Ph.D.

Cycle of offer: irregular

ECTS credits: 6

Teaching method (hours per week): lecture (2) and exercises (1)

Course language: English

Prerequisites: Analysis & Linear Algebra A (Lagrangian optimization, Taylor approximation, implicit function theorem, etc.), Microeconomics A + B, Macroeconomics A + B, basic knowledge of time series analysis desirable (Time Series and Forecasting).

Grading: final exam 90 min

[Schedule](#)

Goals and contents of the module: This course introduces the basic tools for analyzing macroeconomic fluctuations and monetary policies. In the first part of the course, we review the basic business cycle facts. In the second part of the course, we derive a fully micro-founded unified New Keynesian framework for understanding fluctuations in output, employment, and inflation, major crises, and macroeconomic policies, thereby introducing students to the approach most often used in academic macroeconomic analysis by central banks and international institutions. In the third part of the course, we apply the New Keynesian framework to study the role of conventional and “unconventional” monetary policies, including forward guidance and quantitative easing, in situations of “liquidity traps”, i.e., deep crises in which conventional policies are either ineffective or have very different effects than in normal times. End-of-chapter problem sets and tutorials will help students master the materials presented. The tentative outline is as follows:

1. Empirics: Introduction & Business Cycle Measurement
2. Model: The New Keynesian Framework
 - 2.1. Aggregate Demand (AD)
 - 2.2. Aggregate Supply (AS)
 - 2.3. AS-AD Equilibrium and the Propagation of Shocks
3. Policy: Conventional and Unconventional Monetary Policy
 - 3.1. Conventional Monetary Policy: monetary policy implementation, optimal policy, expectations and the credibility and effectiveness of monetary policy, ...

3.2. The Liquidity Trap and Unconventional Monetary Policy: The financial crisis and aggregate demand, the zero-lower bound and the short-run nominal interest rate, the liquidity trap paradoxes, forward guidance, large scale asset purchases, ...

Expected competences acquired after completion of the module: During the class, students will be equally confronted to both theory and data. At the end of the course, students should have understood the mechanics of the New Keynesian framework (i.e., the concepts of aggregate demand, aggregate supply, general equilibrium), and should know how to use this framework to put structure on the data. The course connects undergraduate learning not only with more advanced tools but also with a large body of policy-oriented research in academic journals.

Literature:

- Simon, C. & Blume, L. (1994): Mathematics for Economists, 1st Edition, W. W. Norton & Company.
- Williamson, Stephen D. (2018): Macroeconomics, Global Edition/6th Edition, Pearson.
- Challe, Edouard (2023): Macroeconomic Fluctuations and Policies, MIT Press, Cambridge, MA

Contact Information: tba.

Political Economy: Elections, Information, and Accountability

Responsible teacher of the module: Prof. Dr. Camille Urvoy

Cycle of offer: fall semester

ECTS credits: 5

Teaching method (hours per week): lecture (2)

Course language: English

Prerequisites: Statistik I and II, Grundlagen der Ökonometrie (basic knowledge of statistics and econometrics)

Grading: final take home exam that requires:

- Reading a paper and answering questions
- Working on simulated data to implement causal inference methods.

Processing time of the exam is one week. In total, your answers should not exceed 5,000 words.

[Schedule](#)

Goals and contents of the module: This course will be an introduction to main topics in political economy. We will first study elections, and how well they can map voters' preferences in public policies, as well as the extent to which they allow voters to hold their representatives accountable. We will also consider the role of information, and how recent technological changes (internet, social media) have reshaped the media landscape. We will focus on empirical work that provide case studies of important policies or natural experiments. The goal is to provide students with evidence-based answers on the political economy research questions.

Expected competences acquired after completion of the module: Students are expected to familiarize with reading academic articles.

The goal is that they understand how a research question fits in a broader literature, develop a basic understanding of the econometric methods employed and become able to gauge the credibility of the results. They should also gain a deeper understanding of the topics covered in class and be able to critically analyze policies based on empirical evidence.

Contact information: Camille Urvoy; E-mail: camille.urvoy@uni-mannheim.de

R Programming for Data Science

Instructor: Dr. Zahra Kamal

Cycle of offer: every fall semester

ECTS credits: 7

Teaching method (hours per week): lecture (2) + exercise (2)

Course language: English

Prerequisites: Statistik I + II, Grundlagen der Ökonometrie

Grading: two take-home assignments will be distributed during the semester. They will be graded for each individual student and count each for 20% of the final grade. A final programming exam (90 min) will constitute the remaining 60% of the students' final grades.

Expected number of students in class: depends on students' choice (max. 41). Please register via Portal2.

[Schedule](#)

Goals and contents of the module: The goal of "R Programming for Data Science" is to help students learn the most important tools in R that will allow doing data science efficiently and reproducibly. The course is designed as a blended learning course including lecture and exercise sessions. It gives an overview of the main steps in a typical cycle of data science projects - importing, tidying, transforming, and visualizing data, as well as communication - using R programming. The modules of the course will hit each of these topics in more depth, consisting of an introduction to R programming, data manipulation (data import, tidying, transformation and wrangling), data visualization, programming and Exploratory Data Analysis (EDA), and communication. The course will focus specifically on small and medium-size, in-memory datasets and will not cover big data. Nor does it cover modelling data in detail.

Course Structure: The lecture and the tutorial sessions will take place every week. Lecture contents will be practiced in exercise sessions and deepened with interactive discussions. Over the course of the semester, participating students will have to do two small-scale projects basically to practice and gain hands-on experience using R programming tools (using the R and RStudio interfaces, loading and using R packages, creating quick plots, manipulating data structure and values, writing logical tests).

The project assignments should be handed in individually. The assignments will be evaluated, and the solutions will be presented in class by best-performing student(s).

Expected competences acquired after completion of the module: By the end of the course, students will:

- get familiar with RStudio Integrated Development Environment (IDE).
- understand the coding basics of R programming (syntax and operations, control structures, testing techniques, piping) and its applications in data science,

- learn to manipulate datasets, tidying and transforming data (importing, exporting, wrangling),
- learn about layered grammar of graphics,
- be able to create plots and visualize data,
- learn to do exploratory data analysis using plots and graphics, and visualization techniques,
- gain the skills required to communicate their understanding and insights obtained from data visualization techniques and descriptive analysis of complex datasets.

Main course materials:

- Wickam, H., Cetinkaya-Rundel, M., & Grolemund, G. (2023). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data, ISBN-13: 978-1492097402.
- Grolemund, G. (2014). Hands-On programming with R: Write Your Own Functions and Simulations. ISBN-13: 978-1449359010.

Contact Information: Dr. Zahra Kamal; e-mail: zahra.kamal(at)uni-mannheim.de

Unemployment, Wages, and Mobility: European Labor Markets

Responsible teacher of the module: Prof. Miren Azkarate-Askasua, PhD

Cycle of offer: irregular

ECTS credits: 5

Teaching method (hours per week): lecture (2)

Course language: English

Prerequisites: Microeconomics A + B, Macroeconomics A + B, Statistik I + II, and Grundlagen der Ökonometrie, basic R knowledge

Grading: final exam (90 min, 50%), take-home assignments (40%), and classroom discussion (10%).

The take home assignments will require to write from 1 to 4 pages and there will be 2 assignments.

[Schedule](#)

Goals and contents of the module: This course will study topics in labor markets and macroeconomics including unemployment, job search and job creation, wage differentials, worker sorting and geographical mobility. The course aims at raising interest in commonly discussed labor market issues among students and providing tools and a view on how to think about them. The main objective of the course is to provide a comprehensive view on labor markets to understand the major issues on unemployment and wages. The course will be a mixture of theory and empirical analysis. Some basic knowledge of R is required but the tools on how to use data will be introduced along with the course. Students will be familiar with working with public macro and micro data sources and will learn how to construct aggregate measures. Some questions that will be discussed during the course are: What are the implications of different labor market regimes in Europe? What are the determinants of internal mobility? Why do some countries suffer from youth unemployment?

Expected competences acquired after completion of the module: The goal of the course is to study labor market issues and provide a comparative perspective on labor markets in the context of Europe. Students will be able to understand and evaluate observed phenomena with their theoretical knowledge and critical view on how to analyze the data obtained in this course.

Contact Information: Prof. Miren Azkarate-Askasua, PhD; email: azkarate-askasua@uni-mannheim.de, Office: P04, Office hours: by appointment

Advanced Phase Seminars

Applied Econometrics

Responsible teacher of the module: Prof. Dr. Carsten Trenkler

Cycle of offer: irregular

ECTS credits: 6

Teaching method (hours per week): seminar (2)

Course language: English

Prerequisites: Grundlagen der Ökonometrie and Statistik I + II

Grading: seminar paper (max. 16 pages; 75%), presentations and handout (25%): 15-20 min. short presentation with max. 5 min. Q&A, 30-35 min. main presentation with max. 10-15 min. Q&A, and max. 2 pages handout.

Expected number of students in class: maximum 14

[Schedule](#)

Goals and contents of the module: Students will conduct an own empirical study in order to become familiar with applied research, what includes the ability to interpret empirical results in a meaningful way. Based on the material covered in the course Grundlagen der Ökonometrie, students will extend their knowledge on econometric models, estimation methods, and test procedures in order to solve empirical problems. The seminar topics will refer to the multiple regression models for cross-section data as well as to microeconomic, panel data, and time series models. Thereby, students should gain a broad overview on the various model classes through their own and their fellow students' projects.

Expected competences acquired after completion of the module: Students will have acquired advanced expertise in econometrics and empirical research. They are able to understand and use the corresponding literature for their projects. They will have the required competence for empirical data work (data search, preparation, and analysis). Students are able to divide a comprehensive empirical research project into appropriate sub-problems to be addressed, to interpret and prepare the obtained empirical results in an adequate way, to present the results in oral and written form as well as to defend them within a discussion with their fellow students and the instructor. Students are able to follow specialist presentations and to critically discuss the content of such presentations.

Contact information: Carsten Trenkler, phone: 181-1851, e-mail: trenkler<at>uni-mannheim.de, L7, 3-5, room 105

Current Challenges for the Energy Transition

Responsible teacher of the module: Dr. Mateus Souza

Cycle of offer: irregular

ECTS credits: 6

Teaching method (hours per week): block seminar (2)

Course language: English

Prerequisites: Markets and the Environment (recommended). A strong background in applied econometrics is desirable.

Grading: seminar paper (max. 10 pages, 50%), presentation (20 min, 35%), classroom discussion (15%)

Expected number of students in class: depends on students' choices (maximum 15).

[Schedule](#)

Goals and contents of the module: The course will broadly discuss both demand- and supply-side challenges to decarbonize energy systems (i.e., to transition the economy from fossil fuels to carbon-free energy). This includes topics related to energy efficiency, consumers' responsiveness to energy prices, electricity market design, and investments in renewables. Students will pick one of these topics at the beginning of the term. During the term, students should carefully read at least 5 recent research papers within the chosen topic, published in top journals in economics. A non-exhaustive list of potential papers will be provided. Students will be asked to write a "literature review" of no more than 10 pages, including those 5 papers and potentially others. The literature review should clearly state, with the student's own words, what are the contributions of the papers, the methods used, and how the papers are connected. Students will also have to present an overview of the chosen topic, including summaries of the chosen papers.

Expected competences acquired after completion of the module: The course will help students to develop skills in academic writing and communication. By working on a literature review, students will learn how to summarize complex information, and to identify connections between the published papers related to the topic of choice. These skills will be especially useful for writing the Bachelor thesis. The class presentation will help students to develop communication skills, and to engage in scientific debate. These skills are highly valuable also for non-academic careers.

Further information: At the beginning of the term, students will be provided with a syllabus, including a non-exhaustive list of research articles related to the topics of the course.

Contact Information: Dr. Mateus Souza; email: mateus.souza@uni-mannheim.de

Experimental and Behavioral Economics of Redistribution

Responsible teacher of the module: Dr. Cornelius Schneider

Cycle of offer: irregular

ECTS credits: 6

Teaching method (hours per week): block seminar (2)

Course language: English

Prerequisites: Statistics I and II (Statistik I + II) and Basic Econometrics (Grundlagen der Ökonometrie) are mandatory. Microeconomics A and B as well as Introductory Public Economics could be useful.

Grading: presentation (30 min, 40%), classroom discussion (10%), seminar paper (10 pages, 50%)

Expected number of students in class: 16 (max)

[Schedule](#)

Goals and contents of the module: The main objectives of the course are twofold. First, the course will explore how preferences for redistribution differ across different countries, cultures, and institutional settings.

It explores how personal preferences, (mis)perceptions and norms can inform redistributive (tax) policies. The conventional utilitarian approach often neglects that citizens judge an economic system not only by its allocative achievements, but also by the procedures under which it operates. Therefore, the seminar considers latest empirical research eliciting multiple dimensions of preferences from surveys, experiments, and existing policies. Second, the course examines optimal ways to implement redistribution, specifically focusing on income and wealth taxation. Recent empirical studies (both experimental and field) have become increasingly important for guiding tax policies by evaluating the trade-off between the potential gains and the efficiency losses from taxation. Specifically, behavioral responses to taxation are decisive - e.g., labor supply adjustments, tax evasion or avoidance, migration, or rent seeking activities. The course therefore puts a lot of emphasis on empirical studies that quantify behavioral responses to taxation along different response margins.

Expected competences acquired after completion of the module: Students will become familiar with important quantitative methods to assess the determinants of redistributive preferences and causal effects of redistributive taxation. By examining empirical state-of-the-art papers, students will develop a critical perspective to highlight the advantages and challenges of various methodologies. Furthermore, participants will enhance their ability to read advanced economic papers, to filter the key message(s) out of fairly dense papers and refine their own academic writing and communication skills.

Further information: Please note that you have to register for this seminar within the common registration week.

Contact Information: Dr. Cornelius Schneider; phone: +49 621 181-3425; e-mail: schneider@uni-mannheim.de; L 7, 3-5 room 4.04; office hours: Tuesday 16:00 - 17:00

Firms in the Aggregate Economy

Responsible teacher of the module: Dr. Jan Schymik

Cycle of offer: irregular

ECTS credits: 6

Teaching method (hours per week): block seminar (2)

Course language: English

Prerequisites: Makroökonomik A + B, Grundlagen der Ökonometrie

Grading: term paper (10-12 pages) and presentation (45min); the term paper counts 60% towards the final grade and the presentation counts 40% towards the final grade

Expected number of students in class: max. 15

[Schedule](#)

Goals and contents of the module: The seminar covers topics around the implications of firms on aggregate economic activity. In particular, the seminar focuses on firm-level determinants of globalization, growth, inequality, and productivity.

Expected competences acquired after completion of the module: The students will develop a critical understanding of major theories of firm heterogeneity in macroeconomics.

They apply their knowledge on this topic by discussing empirical evidence on the role of firms for the aggregate economy. During the seminar presentations, students will learn to formulate and defend their position and approaches to solve problems.

Contact Information: Dr. Jan Schymik; e-mail: jan.schymik@uni-mannheim.de

Internet Economics

Responsible teacher of the module: Prof. Dr. Thomas Tröger

Instructors: Robin Ng, Ph.D., Anton Sobolev, Ph.D.

Cycle of offer: irregular

ECTS credits: 6

Teaching method (hours per week): block seminar (2)

Course language: English

Prerequisites: Microeconomics B

Grading: seminar paper (3-4 pages 50%) and presentation (30 minutes 50%)

Expected number of students in class: max. 20

[Schedule](#)

Goals and contents of the module: The rapid development of Internet provides not only new business models and lifestyles but also a novel area for economists to explore. In this seminar, students will present research papers on related topics including two-sided market, price dispersion, information congestion, search engine pricing, and so on.

Expected Competences acquired after completion of the module: Students should acquire good understanding of business organization on Internet and be able to analyze them using economics models.

Further information: Please note that you have to register for this seminar within the common registration week.

Contact Information: Robin Ng, Ph.D., e-mail: robin.ng@uni-mannheim.de, Anton Sobolev, Ph.D.; e-mail: anton.sobolev@uni-mannheim.de

Recent Empirical Evidence on the Causes of (Under-)Development

Responsible teacher of the module: Prof. Dr. Antonio Ciccone

Cycle of offer: each semester

ECTS credits: 6

Teaching method (hours per week): block seminar (2)

Course language: English

Prerequisites: Analysis und lineare Algebra A, Statistik I + II, Grundlagen der Ökonometrie, Macroeconomics A + B

Grading: 25 min. presentation (50%) and 12-18 pages seminar paper (50%)

Expected number of students in class: depends on students' choice (max. 15)

[Schedule](#)

Goals and contents of the module: We will discuss recent and influential research papers on the causes of development and underdevelopment.

Expected competences acquired after completion of the module:

- Students learn to read empirical research papers in economics, which directly confronts them with scientific language and argument.
- Students learn to synthesize the contribution research papers aim for.
- Students learn to communicate the contribution research papers aim for.
- Students learn to put the contribution of research papers into perspective using related research in economics and elsewhere.
- They also learn to evaluate recent research.

Contact Information: Prof. Dr. Antonio Ciccone; Phone: (0621) 181-1830; E-mail: antonio.ciccone@uni-mannheim.de; Office: L7, 3-5, room 2.19

The emergence of a global economic center: an economic history of London, c. 1200 - c. 1939***

Responsible teachers of the module: Prof. Dr. Jochen Streb / Dr. Alex Spike Gibbs

ECTS credits: 6

Teaching method (hours per week): block seminar (2) with a field trip to London

Grading: written essay 15-20 pages: 60% of final grade – deadline: 6.11.24

Oral presentation: 30% of final grade – deadline: 12.11.24

Discussion: 10% of final grade

Course language: Englisch

Prerequisites: Wirtschaftsgeschichte

Expected number of participants: max. 8

Goals and content of the module: Today London is a global economic centre. It is the largest city in western Europe, being home to around 9 million inhabitants, around 40% of which have immigrated to the city from abroad. Its gross regional product represents around a quarter of UK GDP, in large part thanks to its financial services industry. It is served by a vast transport network, including the famous Tube, which serves 272 different stations across the city. To understand London's economic prominence today, we need to understand its past. How did a city which was marginal in around 1200 become the largest city in Europe by the nineteenth century? To explore this question, we will consider several themes including London's infrastructure and place in the UK's economic geography, the living standards, health and welfare of its population, the growth of financial markets, and the lived experience of immigrants.

Expected competences acquired after completion of the module: The central objective of the seminar is to enable students to work independently on a scientific problem in the field of economic history. After attending the course, students will be able to systematically identify the relevant research literature, to comprehend, classify and critically scrutinize its contents, to position their seminar paper in the respective research context and to work with both historical and economic methods. In addition, they are familiar with presenting the results of their work and defending them in a professional discussion.

Further information: After two preparation seminars, we will go on a field trip to London in mid-November. Here students will have the opportunity to consider the economic history of the city in situ. We will visit an archive, museum, and several standing buildings to understand the economic evolution of the city, and students will share presentations based on their research on the topics of the course. While we will part-fund this field trip using university funds, students will also need to make an own contribution. We will book return flights from Frankfurt to London and organise cheap shared accommodation. Please note that due to the need to organise the field trip, students must commit to taking this course in June. Students who drop out of the course after they have registered, may be liable to pay the full fees for the trip, including the part funded by the university.

Dates: Preparation session: 11.09.24 – 17.15-18.45, Preparation session: 09.10.24 – 17.15-18.45, Fieldtrip: 12.11.24-14.11.24 – All day.

Preparation and organisation: We will book return flights from Frankfurt to London and organise cheap shared accommodation. Please be aware that you will need to meet part of the costs of the fieldtrip yourselves.

[Topics and literature list](#)

Contact: Prof. Dr. Jochen Streb; phone: 0621-181-1932; e-mail: streb@uni-mannheim.de

Responsible teacher of the module: Prof. Laura Grigolon, Ph.D.

Cycle of offer: each fall semester

ECTS credits: 6

Teaching method (hours per week): block seminar (2)

Course language: English

Prerequisites: Grundlagen der Ökonometrie and Industrial Organization

Grading: seminar paper (completion within 4 weeks, approx. 10 pages with figures and tables) and presentation (approx. 20 minutes); seminar paper (50%), presentation (50%).

Expected number of students in class: max. 13

[Schedule](#)

Goals and contents of the module: The seminar has the main goal to train the necessary skills to read, understand, summarize, and present scientific work applied to policy-relevant questions in Industrial Organization, with a focus on competition policy.

There will be a choice of papers for which a dataset is also available. Students will receive the paper and, depending on their interest, the dataset and code that allows an empirical study of the paper.

Expected competences acquired after completion of the module: Students will be able to:

- Understand the general motivation of the subject: What is the topic about? Why is it an important policy problem?
- (Optional) Perform their own empirical analysis. Based on the dataset and code, students can implement their own empirical analysis. Papers may sometimes use complex econometric methods and it is not the intention to copy or replicate the paper exactly.
- Reflect about the application of the policy to Germany or other countries. Students will be able to discuss policy issues applied to industrial organization, with a focus on competition issues, and whether the problem is interesting for Germany (or other countries) and how a policy recommendation can be applied.

Further information: Please note that you have to register for this seminar within the common registration week.

Contact information: Prof. Laura Grigolon, Ph.D.; Phone: 0621-181 1913; laura.grigolon@uni-mannheim.de

Additional courses for Economists

Forschungsseminar in Wirtschaftsgeschichte

Modulverantwortlich: Prof. Dr. Jochen Streb

Turnus des Angebots: jedes Semester

ECTS-Punkte: keine

Lehrmethode: Seminar (2 SWS)

Unterrichtssprache: Deutsch oder Englisch je nach Vortrag

Teilnahmevoraussetzungen: keine

Benotung: keine

Ziele und Inhalte des Moduls: Im Forschungsseminar präsentieren Wissenschaftler aus Mannheim und auswärts ihre aktuellen Forschungsergebnisse.

Erwartete Kompetenzen nach Abschluss des Moduls: Die Teilnehmer*innen setzen sich mit dem aktuellen Forschungsstand in bestimmten wirtschaftshistorischen Themenfeldern auseinander und nutzen diese Erkenntnisse für ihre eigenen wissenschaftlichen Abschlussarbeiten.

Weitere Informationen: Für Studierende, die im aktuellen Semester eine Bachelor- oder Masterarbeit am Lehrstuhl für Wirtschaftsgeschichte anfertigen, wird der Besuch des Forschungsseminars empfohlen.

Das aktuelle Programm entnehmen Sie bitte dem gesonderten Aushang „Research in Economic History“ unter folgendem Link: <https://www.vwl.uni-mannheim.de/streb/forschung/aktuelle-vortraege/>.

Kontakt: Prof. Dr. Jochen Streb; Telefon: 0621-181-1932; E-Mail: streb@uni-mannheim.de. Um Terminvereinbarung per Mail wird gebeten.

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