UNIVERSITÄT MANNHEIM
Abteilung Volkswirtschaftslehre

Annotated Course Catalog for courses held in English language
Spring Semester 2024 - B.Sc. Economics

Changes and updates are published in a separate file: https://www.vwl.uni-mannheim.de/studium/bachelorstudium/vorlesungsverzeichnis/

Please note that there is a single week to register for seminars in the Bachelor program (4 - 10 December 2023). Changing or cancelling seminar registrations is only possible in the week after the registration period.

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

Version: 30 November 2023

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Introductory Phase

Macroeconomics A

[Schedule lecture](#)
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Responsible teacher of the module: Prof. Miren Azkarate-Askasua, Ph.D.
Further instructor(s): teaching assistants for exercise classes
Cycle of offer: each spring
ECTS credits: 8
Teaching method (hours per week): lectures (4) + exercises (2)
Course language: English
Prerequisites: Analysis or Analysis und lineare Algebra A, recommended: Grundlagen der Volkswirtschaftslehre
Grading: final exam (120 min)

Goals and contents of the module: The course together with Macroeconomics B provides a comprehensive introduction to macroeconomics. Participants will become familiar with fundamental macroeconomic theories and learn how they are applied to economic policy issues. In addition, the main macroeconomic facts, and the empirical testing of the theories against these facts are discussed. The course Macroeconomics A focuses mainly on medium and long-run economic development (growth), while Macroeconomics B focuses on the short-run (business cycle).

Specific topics include:
1. Macroeconomic data
2. Economic growth
3. Microeconomic foundation
4. Saving and investment
5. Open economies
6. Aggregate demand: IS-LM model
7. Aggregate demand and aggregate supply: AS-AD model
8. Unemployment

Expected competences acquired after completion of the module: Students who successfully complete the course know the principles of macroeconomic thinking.
They can apply these principles to analyze the effects of economic policies and to evaluate which effects are socially desirable. In addition, they can use their knowledge of the theory and empirics of macroeconomics to comment on macroeconomic issues in a professionally sound manner. Furthermore, they are able to formulate proposals for improving the overall economic situation and to discuss these proposals with economic experts.

Further information: please register via Portal2.
Textbook: Mankiw, N. (2019), Macroeconomics (Tenth ed.), Macmillan international higher education, New York, NY.
Contact information: Prof. Miren Azkarate-Askasua, Ph.D.; e-mail: azkarate-askasua@uni-mannheim.de.

Microeconomics A

Responsible teachers of the module: Prof. Dr. Thomas Tröger
Further instructors: Anton Sobolev, Ph.D., Robin Ng, Dr. Alexander Donges (coordination exercises), teaching assistants
Cycle of offer: each spring semester
ECTS credits: 8
Teaching method (hours per week): lecture (4) + Exercise (2)
Course language: Lectures and Exercises are offered in English and German.
Prerequisites: Analysis und lineare Algebra A, Grundlagen der Volkswirtschaftslehre recommended
Grading: final exam (120 min)

Goals and contents of the module: The goal is to teach the functioning and the welfare properties of competitive markets. The emphasis is on the interdependence of different markets (general equilibrium) and the resulting insights into welfare economics. Towards these goals the topics of preference relations, consumer theory, decisions under uncertainty, intertemporal decisions, producer theory and taxation of goods are introduced. Partial equilibrium is developed as a special case of general equilibrium. The taught knowledge of theoretical methods gets practiced in numerous applications. The technical aspects are amplified in particular in the tutorials and in problems solved in class. In contrast to the course Microeconomics B, the focus in Microeconomics A is on the analysis of non-strategic behavior. The knowledge obtained in Microeconomics A is essential for many advanced courses in economics and business administration.

Expected competences acquired after completion of the module: The students are able to move away from the individual point of view when analyzing social situations. Instead, they comprehend the interaction of individuals are an important factor, in particular in the context of interdependent markets, of decisions under uncertainty, and of decisions with delayed consequences. The students have learned to model economic problems as mathematical optimization problems under constraints and to think in terms of equilibria. After completing the course, the students are able to reproduce the obtained theoretical knowledge and to apply it to related problems. Furthermore, they have critically looked into the model of a competitive market and understand the assumptions that are necessary to make model applicable. The students are able to deepen their knowledge in advanced courses as well as in self-study. The small number of participants per tutorial facilitates the interaction between the students and the tutors.
Through the enfolding discussions, the students improve their ability to take field-related positions and formulate arguments to defend these.

Further information: Literature:
- Robert S. Pindyck and Daniel S. Rubinfeld (2018). Microeconomics (9th edition), The Pearson series in economics. The 8th edition can still be used.
- Hal R. Varian (2014). Intermediate Microeconomics: A Modern Approach (9th Edition), Norton & Company.

Contact Information: Anton Sobolev, Ph.D.; L7, 3–5 – room 3.32; E-Mail: anton.sobolev@uni-mannheim.

Advanced Phase

Lectures

Economics of Monetary Union**

[Schedule](#)

Responsible teacher of the module: Prof. Antoine Camous, PhD.
Cycle of offer: each spring semester
ECTS credits: 5
Teaching method (hours per week): lecture (2)
Course language: English
Prerequisites: Macroeconomics A and B
Grading: three home assignments will be distributed and could be handed in by groups of two. They will be graded and count each for 20% of the final grade. Each assignment will take appr. 3 hours to be completed. A final project will be carried individually by class participants (40% of the final grade). The purpose of the project is to frame a relevant question, find appropriate data to provide an answer and present the findings in a concise way. The final output shall consist of a synthetic report (max 3 pages) including a leading graph.

Goals and contents of the module: To form a Monetary Union, countries renounce independent monetary policy and exchange rate adjustments. They adopt a common currency, free capital circulation, and centralize monetary policy. Still, substantial elements of economic policy (fiscal policy, labor market regulations, etc.) are kept being conducted at the national level. Why do countries form a monetary union? What kind of issues can arise? How to design institutions for a viable and effective experience? Concretely, what happens when economic performances of countries differ? What if firms can freely operate across borders, while being regulated by national governments? Is the conduct fiscal policy different in a monetary union? etc. This class intends to present theoretical frameworks to understand and critically review these economic issues. The European project, the recent crises and current debates on institutional reforms will be discussed in light of the elements presented in class, and contrasted to other monetary unions, essentially the United States. Weekly lectures bring together theoretical elements of monetary union institutions with a data-based discussion of the European experience.

Lectures are organized around the following topics.
1. Currency arrangements and currency area.
2. Forming a monetary union: US then, Europe now.
3. Monetary union and institution design: theory.
4. The first decade of the EMU. Did the Eurozone plant the seeds of its own crisis?
5. The Eurozone crisis reveals deep institutional weaknesses.
6. Reform agenda. Can the Eurozone be completed for a viable and effective experience?

Expected competences acquired after completion of the module: Students are expected to:
- Acquire an advanced knowledge of the theories motivating the introduction of Monetary Union and their empirical implications.
- Develop a critical appreciation of institutional arrangements and policy proposals. It is expected from students to identify the context, the strengths, and weaknesses of such policy arrangement.
- Propose an original perspective on a specific dimension of class discussions, formulate this idea with concision and communicate it effectively, both orally and in writing.

Accordingly, participation to class discussions and individual curiosity is a prerequisite for a successful command of class material.

Further information: The class starts on the week of February 12. Lectures take place weekly. A specific reading list will be provided a week in advance of each lecture. Material will be posted on the Ilias portal. Detailed elements about the project and evaluation will be provided in class. The present description can evolve by the start of the course.

Contact information: Antoine Camous, Tel. (06221) 181 -1806, E-Mail: camous@uni-mannheim.de, Office: 2.43, Office hours: Wed 4-5 pm.

Family Economics**

[Schedule](#)

Responsible teachers of the module: Prof. Anne Hannusch, Ph.D. / Dr. David Koll / Prof. Michèle Tertilt, Ph.D.
Cycle of offer: irregular
ECTS credits: 6
Teaching method (hours per week): lecture (2), exercises (1)
Course language: English
Prerequisites: Microeconomics A + B and Macroeconomics A + B
Grading: final exam 120 min (60%) + midterm 120 min (40%)

Goals and contents of the module: This course will address three broad topics in family economics:
- The causes and consequences of historical changes in the organization of families (e.g., the demographic transition and the increase in female labor force participation
- The relationship between economic development and family laws
- The effect of policies that target families/children (e.g., parental leave policies, social security, child care subsidies).

Expected competences acquired after completion of the module: The course will provide a solid background in economic models of family behavior by analyzing the determinants of family formation, household specialization and decision-making, fertility decisions, and intergenerational relationships. Students will be able to understand the role of families in traditional and modern societies and their evolution over time.

Contact Information: Prof. Anne Hannusch, Ph.D., E-Mail: anne.hannusch@uni-mannheim.de
Dr. David Koll, E-Mail: koll@uni-mannheim.de

Game Theory**

[Schedule](#)

Responsible teacher of the module: Prof. Dr. Martin Peitz
Instructors: Dr. Daniil Larionov / Yulia Evsyukova
Cycle of offer: once a year
ECTS credits: 6
Teaching method (hours per week): lecture (2) + exercise (1)
Course language: English
Prerequisites: Microeconomics A and Microeconomics B or equivalent
Grading: final exam (90 min)

Goals and contents of the module: 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 4 parts:
1. Bayesian Games
2. Extensive Games
3. Repeated Games
4. Advanced Solution Concepts

Expected competences acquired after completion of the module: 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 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.

Contact Information: Yulia Evsyukova, e-mail: yevsyuko@mail.uni-mannheim.de / Dr. Daniil Larionov, e-mail: Daniil.Larionov@zew.de

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Impact Evaluation

[Schedule](#)

Responsible teacher of the module: Dr. Benjamin K. Chibuye / Dr. Viviana Urueña
Cycle of offer: every spring semester
ECTS credits: 7
Teaching method (hours per week): lecture (2) + exercise (2)
Course language: English
Prerequisites: Statistik I + II, Grundlagen der Ökonometrie
Grading: exam (90 minutes) and presentation, 80% final exam (90 minutes), 20% presentation (30 minutes including 5 minutes paper critique and 5 minutes group discussion).
Maximum number of students in class: 41. Please note that you have to register via Portal2.

Goals and contents of the module: The course is designed for introducing students to the main empirical strategies that are typically used for impact evaluation: Randomized Control Trials, Identification on Observables, Instrumental Variables, Difference-in-Difference, Regression Discontinuity Design. Students will be both exposed to fundamental concepts behind the estimation of causal effects and related applied applications. Students will be asked to actively participate and prepare a presentation once during the tutorial session. The lecture and the tutorial will take place every week. Lecture contents will be practiced during Stata exercise sessions in the tutorial or deepened with discussions of the current literature presented by students. Every participating student will have to present one research article once. The 30-minutes presentations (+/-10%) will contain a 20-minute summary of the paper and a 5-minute discussion of positive and negative paper aspects, potentially including secondary literature. Additionally, the presenting student will have to prepare 2-3 questions suitable to motivate a 5-minute group discussion with all course participants. In order to participate in the group discussions, all students are required to read the suggested literature before the tutorial sessions.

Expected competences acquired after completion of the course:

- Understand what impact evaluation is and the different techniques used
- Understand the identifying assumptions underlying each impact evaluation technique
- Review the "parameters of interest"
- Make judgements about what specific impact evaluation technique is appropriate to use according to the context and type of intervention

Further information: Main reading: Frölich, M. & Sperlich, S. (2019): Impact Evaluation – Treatment effects and causal analysis, Cambridge University Press. Other useful material:

- Khandker S. et al. (2010): Handbook on Impact Evaluation: Quantitative Methods and Practices
- Caliendo M. & Kopeinig S. (2005): Some Practical Guidance for the Implementation of Propensity Score Matching
- Angrist, J., Imbens, G. & Rubin, D. (1996): Identification of causal effects using instrumental variables. Journal of the American Statistical Association, 91(434), 444-455.
- Lee, D. & Lemieux, T. (2010): Regression discontinuity designs in economics. Journal of economic literature, 48 (2), 281-355.

Contact Information: Dr. Benjamin K. Chibuye, e-mail: chibuye(at)uni-mannheim.de
Dr. Viviana Urueña, e-mail: uruena(at)uni-mannheim.de

Labor Economics**

Schedule

Responsible teacher of the module: Prof. Han Ye, Ph.D.
Cycle of offer: each spring semester
ECTS credits: 5
Teaching method (hours per week): lecture (2)
Course language: English
Prerequisites: Microeconomics A + B
Grading: final exam (90 min)

Goals and contents of the module: This course provides an introduction into the field of labor economics. The emphasis is on applied microeconomics and empirical analysis. Topics to be covered include:

- labor supply and demand,
- tax policy,
- minimum wage,
- inequality,
- gender wage gap,
- discrimination,
- and unemployment.

Expected competences acquired after completion of the module: The goal of the course is to provide a thorough understanding of central concepts in labor economics and to provide an introduction into empirical research in labor economics. Students will learn to use Stata to replicate some research results.

Contact Information: Han Ye, email: han.ye@uni-mannheim, Office: L7, 3-5 room 2.23

Markets and the Environment

[Schedule](#)

Responsible teacher of the module: Prof. Mateus Souza, Ph.D.
Cycle of offer: every spring semester
ECTS credits: 7
Teaching method (hours per week): lecture (2) + exercise (2)
Course language: English
Prerequisites: Microeconomics A + B, Grundlagen der Ökonometrie
Grading: written final exam, 90 min.

Goals and contents of the module: This course will provide an introduction to the field of environmental and natural resource economics. The course will be subdivided into four subject areas:

- Economic analysis of policy instruments for regulating environmental pollution: Command-and-control regulation vs. market-based policy instruments.
- Techniques for the valuation of environmental quality as an input for cost-benefit analysis: Hedonic pricing, travel cost method and contingent valuation.
- International aspects of environmental regulation: International environmental agreements, "pollution leakage" via international trade and investment.
- Efficient management of renewable and non-renewable natural resources.

Expected competences acquired after completion of the module: Students acquire a broad knowledge in the field of environmental and resource economics. They understand the economic underpinnings of environmental regulation, for example, how environmental externalities affect social welfare, and why international cooperation to curb transboundary pollution is sometimes hard to achieve. Furthermore, they acquire an economic understanding of supply and demand for natural resources, and why scarce resources command a rent even when markets are competitive. To analyze these issues and to solve the relevant theoretical models, students apply various game theoretical and mathematical tools, such as optimization methods and multivariate calculus. For a better grasp of the mechanics of these models, students learn how to use spreadsheet software to solve optimization models and how to employ statistical software to estimate quantitative models of environmental valuation. Computer tasks are solved in teams of 2-3 students, so that students learn how to solve applied problems in small teams and communicate their ideas to fellow students. 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. Likewise, they should not simply employ computational tools but understand the limitations of these theories, and how these limitations can be overcome.

The field of environmental economics has a lot of real-world applications. For instance, a graduate working in an environmental regulatory authority will be able to apply both the theory of environmental regulation and environmental valuation techniques when deciding whether to impose quota or a tax on pollution emissions. When working for a private corporation that participates in a cap-and-trade system for pollution emissions, a graduate will be able to apply the tools learned in order how to best respond to this policy. More generally, this course promotes strategic, analytical, and critical thinking, which is crucial in any professional career. The field of environmental economics uses analytical and quantitative tools. Theories are formulated using formal, mathematical models. However, 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 environmental and resource economics.

Contact Information: Prof. Mateus Souza, Ph.D.; L7, 3–5 Room 225; phone: +49 621 181-1797; e-mail: mateus.souza@uni-mannheim.de

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Statistics and Stata

Schedule

Responsible teacher of the module: Dr. Ingo Steinke / Nicholas Barton, Ph.D.
Cycle of offer: every spring semester
ECTS credits: 7
Teaching method (hours per week): lecture (2) + exercise (2)
Course language: English
Prerequisites: Statistik I + II, Grundlagen der Ökonometrie
Grading: programming exam (90 min.)
Expected number of students in class: depends on students' choice (max. 41). Please register via Portal2.

Goals and contents of the module: The course gives an introduction into the data management in Stata. That includes how to set up do-files, the preparation of data for analysis, the generation of variables, the use of macros in Stata, and the merging of data sets. Basic and advanced statistical procedures will be discussed in the course. For each model, there will be an introduction to the statistical model, and it will be shown how to analyze the corresponding data with Stata and how to interpret the output of Stata. The models considered are some elementary statistical models, the linear regression model with homoscedastic and heteroscedastic error terms, analysis of variance models, linear panel data models, nonlinear regression models and binary and multinomial models.

Expected competences acquired after completion of the module: The students know basic probabilistic and statistical concepts, e.g., the concept of a statistical test and how to compute and use p-values. The students can analyze data with Stata: The students are able to review a data set, generate summary statistics, and merge data sets. They know how to work with variables, matrices, and macros. They know how to perform elementary tests. The students can generate advanced plots. They are able to set up a linear model with homoscedastic or heteroscedastic error terms and understand the results provided by Stata. They can do an analysis of variance and test for heteroscedasticity in a linear regression model. They understand the ideas of linear panel data regression and can analyze corresponding data. The students are able to estimate the parameters, perform tests for the parameters, and analyze the results in nonlinear regression models and binary choice models.

Further information: Literature: Cameron, A., & Trivedi, P. (2022). Microeconometrics using Stata (Second ed.). College Station, Texas.
Contact Information: Dr. Ingo Steinke; Phone: (0621) 181 1940; e-mail: ingo.steinke(at)uni-mannheim.de
Nicholas Barton, Ph.D.; e-mail: barton(at)uni-mannheim.de

The Impact of Technology (and Artificial Intelligence) on the Labor Market/****

Responsible teacher of the module: Steffen Habermalz, Ph.D.
Cycle of offer: irregular
ECTS credits: 6
Teaching method (hours per week): lecture (2) + exercise (1)
Course language: English
Prerequisites: Grundlagen der Volkswirtschaftslehre (Principles of Economics)
Grading: final exam (90 min, 100%)

Goals and contents of the module: Especially since the Industrial Revolution, technology has transformed economies throughout the world. In this course we are analyzing the impact of technology on labor market outcomes like wages and employment. After a look at early effects of new technologies before WWII we will focus on the effects of developments in computerization, automation, and robotics.
Finally, we will debate and predict the effects of new tools like machine learning and artificial intelligence on labor market outcomes in the (near) future.

Expected competences acquired after completion of the module: Graduates have developed a critical understanding of the history of technologies like automation and artificial intelligence. They understand the most important theories, principals, and methods of the impact of technology on labor markets and are able to deepen their knowledge in a vertical, horizontal and lateral way. Graduates have proven deepened knowledge on the current level of research in selected fields of study.

Contact Information: Steffen Habermalz, Phone: (0621) 181-1785, email: habermalz@uni-mannheim.de, Office: L7 3-5 room 1.44, Office hours: by appointment.

Time Series and Forecasting (TSF)

Responsible teacher of the module: Dr. Toni Stocker
Cycle of offer: each spring semester
ECTS credits: 8
Teaching method (hours per week): lecture (2) + exercise (3)
Course language: English
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 form 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.

Goals and contents of the module: In large part, economic data is based on time series, which is data collected on the same observational unit at multiple time periods (e. g. yearly, quarterly, or monthly). Analyzing time series data requires specific statistical models and methods, which are usually not taught in basic statistics and basic econometrics courses. Subject of this course is to provide an overview about the most important standard methods for describing and analyzing time series data.

Thereby the main focus is on the practical application of forecasting methods. The Statistical Software R will intensively be used throughout the course and also in the final exam.

Contents:
- Introduction to TSF
- Review of Basic Essentials
- Basic Elements of TSF
- Basic Properties of Time Series
- Forecasting Theory
- AR(I)MA Processes
- ADL- and VAR-Models
- Nonstationarity (Trend and Breaks)
- VAR-Models and Cointegration
- Additional Topics in TSF

Expected competences acquired after completion of the module: At the end of the semester students
- know and understand most common TSF methods and their theoretical background
- know how to construct forecasting models, how to conduct model based forecasts and how to check model performance
- can proficiently use R for all important parts of TSF: constructing graphics, estimating, and testing, forecasting, model diagnosis and assessment
- have experienced the possibilities and limitations of time series methods on the basis of real data examples

Further information: Students should have a solid understanding of Basic Statistics and Basic Econometrics. 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@uni-mannheim.de; Office: L7, 3-5; 1st floor, room 143, Office hours: Wednesday, 3:00-4:30 p.m. or upon appointment

Seminars

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Behavioral Public Economics

Responsible teacher of the module: Prof. Arthur Seibold, PhD
Cycle of offer: spring semester
ECTS credits: 6
Method (hours per week): block seminar (2)
Course language: English
Prerequisites: introductory classes in Microeconomics and Econometrics; having taken Introductory Public Economics is desirable
Grading: seminar paper (approx. 10 pages, 50%), presentation (45 min, 40%), classroom discussion (10%)
Expected number of students in class: max. 15

Goals and contents of the module: Insights from behavioral economics are increasingly applied to a range of topics in public economics. While traditional behavioral economics often relies on experimental evidence, recent research demonstrates that individuals do not behave rationally in many relevant field (real-world) settings. This seminar will analyze a number of classic questions in public economics, such as individual responses to tax and expenditure policies, from an angle of behavioral economics. The discussion will focus on patterns of deviations from rational behavior, as well as potential consequences for policy design. Students will write a paper (approx. 10 pages) and present their work in the seminar.

Expected competences acquired after completion of the module: By the end of the course, students will be able to
- apply microeconomic methods to topics in behavioral public economics
- independently analyze recent research papers and critically evaluate their theoretical arguments and empirical evidence
- understand the topics covered corresponding to recent research, and usefully apply this to real-world issues in public policy where behavioral aspects play a role

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

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Biases in economic decision making with ChatGPT**

Responsible teacher of the module: Prof. Dr. Henrik Orzen
Cycle of offer: each spring semester
ECTS credits: 6 ECTS
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Microeconomics A + B
Grading: 10 pages seminar paper (50%), 45 min. presentation (40%), classroom discussion (10%)
Expected number of students in class: 13

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Goals and contents of the module: The goal of this seminar is twofold: The primary goal is to introduce students to a range of empirical and experimental findings that reveal systematic biases in human decision making-behavior that deviates systematically from the rational choice benchmark. Thus, these biases directly contradict conventional homo economicus assumptions and therefore raise the question to what extent traditional modelling approaches are tenable. In this seminar we will discuss various topics in this field. A secondary goal is to explore to what extent advanced AI chatbots like ChatGPT can be of assistance in learning more about a topic and in composing academic texts.

Expected competences acquired after completion of the module: By the end of the module participants will be able to demonstrate a critical understanding of particular behavioral biases in the context of individual choice and strategic decision making. Students will have gained knowledge of where and how conventional assumptions in economics such as unlimited rationality and own-payoff maximization can fail. They will have improved their ability to critically evaluate empirical evidence and theoretical approaches in economics. Furthermore, they will have improved their presentation and communications skills and have gained a better understanding of potential benefits and limitations AI chatbots in the academic realm.

Further information: Please note that you have to register for this seminar within the common registration week.
Contact Information: Prof. Dr. Henrik Orzen; Phone: (0621) 181 - 1890; email: henrik.orzen@uni-mannheim.de; Office: Room 4.01; Office hours: Tuesdays, 4-5pm (by appointment only).

Chinese Economy: Globalization, Firms, and Labor Markets

Schedule

Responsible teacher of the module: Prof. Lei Li, Ph.D.
Cycle of offer: each spring semester
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Grundlagen der Ökononetrie (Basic Econometrics)
Grading: 3-5 pages seminar paper (30%) + 45 minutes presentation (40%) + in-class discussion (30%). Classroom discussion includes asking other presenters questions during/after their presentations and participating in the in-class discussion for each topic proposed by the teacher.
Expected number of students in class: depends on students' choice, maximum 15.

Goals and contents of the module: This seminar is designed for students interested in international trade, labor economics, applied econometrics, and the Chinese Economy. Our first goal is to provide an introduction to a set of important topics related to the economic development of China so that students have a good understanding of the Chinese Economy and China's impact on the rest of the world. A tentative list of topics includes the US-China trade war, China's trade liberalization, China's population control policy and its impact on China's economic development, labor market dynamics (wage, employment, and human capital accumulation), environment and pollution, agricultural reforms, and firm reforms. The second goal is to introduce frontier research to students. We will draw on some recent academic papers from international trade, labor economics, finance, development economics, and environmental economics, which will allow students to have a good understanding of cutting-edge research and help students outline future research questions.

Expected competencies acquired after completion of the module: Students develop skills in reading, understanding, and critically evaluating research papers in the field of Chinese economy. They are also expected to have a good understanding of the widely used empirical tools. They will improve their competencies in literature review, scientific writing, and presentation skills. They are expected to hand in a three-page summary report and give a 30-40 minutes presentation.

Contact Information: Prof. Lei Li, Ph.D.; L7, 3-5, Room 301; Phone: +49 621 181-1911; E-mail: lei.li@uni-mannheim.de

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Corporate Social Responsibility (CSR)**/****

Schedule

Responsible teachers of the module: Prof. Nicolas Bonneton, Ph.D.
Cycle of offer: once a year
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: none
Grading: presentation (30 minutes, 30%), seminar paper (5 pages, 60%), and classroom discussion (10%)
Expected number of students in class: max. 15

Goals and contents of the module: students must choose one of the following two options.
First, students can pick a paper on selected topics relating to CSR and give a presentation to discuss the paper's strengths and weaknesses. Alternatively, students can create their own case study documenting one firm/sector's CSR activities (or lack of CSR). Based on their work, and the comments that they receive in the presentation, students are required to write a report summarizing and critically discussing the paper/case study and synthesizing the findings from other presentations. A detailed list of topics and associated papers will be circulated once the seminar spots have been allocated.

Expected competences acquired after completion of the module: the students will improve their ability to critically think about societal issues. They will improve their competencies in scientific writing and further their presentation skills.

Contact: Prof. Nicolas Bonneton, Ph.D., E-mail: nicolas.bonneton@gmail.com

Econometrics of Antitrust

Responsible teacher of the module: Helena Perrone, Ph.D.
Cycle of offer: each spring semester
ECTS credits: 6
Teaching method (hours per week): block seminar (2 SWS)
Course language: English
Prerequisites: Mikroökonomik A + B, Statistik I + II, and Grundlagen der Ökonometrie
Grading: 60% presentation + 15% classroom discussion + 25% written report (2-3 pages). The presentation should last 40 minutes + 10 minutes of classroom discussion.
Expected number of students in class: max. 15

Goals and contents of the module: The aim of this course is introducing students to the most used empirical techniques in Competition Policy and Antitrust. It will cover academic papers and European and U.S. competition cases that have intensely used empirical methods and especially econometrics.

Expected competences acquired after completion of the module: Students will be introduced to the standard empirical and econometrics techniques in competition policy and antitrust. They will also be familiarized with important European and U.S. competition cases. They will develop skills in the sense of recognizing which empirical techniques are more appropriate to analyze different anti-competitive effects. They will also develop analytical skills, which will help them identify identification/endogeneity problems in different applications.

Further information: The reading list will be provided in the first meeting. Presentations will be blocked in two days in April or May. Please note that you have to register for this seminar within the common registration week.
Contact Information: Prof. Helena Perrone, Ph.D.; Phone: +49 621 181-1838, E-mail: helena.perrone@uni-mannheim.de, Office: L 7, 3-5 – room 3.13.

Economics of Crime

Responsible teacher of the module: Prof. Dr. Wladislaw Mill
Cycle of offer: every second spring semester
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Statistics I + II and Basic Econometrics are mandatory. Microeconomics A + B would be also very useful.
Grading: classroom discussion (5min, 20%) + seminar presentation (25min, 30%) + paper summary (10 pages, 50%). Students will choose a paper from the reading list and present it in the seminar. Moreover, they will write a short seminar paper, which summarizes and critically evaluates the chosen paper.
Expected number of students in class: depends on students' choice (max. 13)

Goals and contents of the module: This course focuses on the economic study of crime.

In particular, we will view criminals - different from the traditional approach of criminologists or sociologists - as utility-maximizing decision makers and study how incentives change criminal behavior. To do so, we will focus on socio-economic determinants of crime and how crime can be deterred. More specifically, we will discuss how unemployment, poverty, and education lead to criminal behavior; how police, incapacitation and death penalty reduce crime. We will also discuss the topics of guns and alcohol.

Expected competences acquired after completion of the module: Students develop skills in reading and analyzing research papers. They are asked to read a research paper in detail and write a critical summary of it. Students also learn to communicate their understanding through an oral presentation. Students develop skills in analyzing issues in economics of crime and understanding their effects on economic agents using models, and empirical methods. Furthermore, this course will teach students how the issues of crime can be evaluated using widely used methods such as applying matching, difference-in-difference, and instrumental variable approaches.

Further information: Please note that you have to register for this seminar within the common registration week.
Contact Information: Wladislaw Mill; Phone: (0621) 181 -1897; email: mill@uni-mannheim.de, Office: 418, Office hours: Tue 16-17.

Environmental Regulation of Firms: Empirical Evidence

Schedule

Responsible teacher of the module: Dr. Andreas Gerster
Cycle of offer: irregular
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Markets and the Environment (can be taken concurrently)
Grading: seminar paper (50%), presentation (30%), classroom discussion (20%)
To meet the course requirements, students will have to write a research paper of at least 10 pages on a clearly defined topic within the context of the seminar topic. They will then present their papers in class to their fellow students in a clear and succinct way. Presentation and discussion together should last between 30 and 40 minutes, depending on the number of participants.
Expected number of students in class: depends on students' choice (max. 20)

Goals and contents of the module: Since environmental policies to regulate firms were first implemented more than four decades ago, the initial "command-and-control" approach has given way to more decentralized, price-based policies to regulate pollution emissions. Drawing on empirical research, this seminar analyzes a variety of economic, political, and environmental aspects of the environmental regulation of firms: Environmental effectiveness and economic costs, impacts on international competitiveness, incentives for innovation in clean technologies, the impact of compensation schemes, as well as implications of policies for environmental justice.

Moreover, the course will allow students to enhance their methodological skills. At the beginning of the semester, we will discuss micro-econometric methods based on applied research papers. The aim of these classes is to assist students in evaluating the empirical approaches of the papers discussed later in the seminar.

Expected competencies acquired after completing the module: Through the seminar, students will improve their ability to absorb the current state of the academic literature, to critically reflect the adequacy of empirical research designs, and their academic writing skills. Finally, students learn how to present their work and engage in a scientific debate. All of the above skills are of outstanding importance in many professional careers for economics graduates, especially in English, the language of instruction for this class. These skills are also helpful to them when working on their Bachelor thesis.

Contact Information: Dr. Andreas Gerster; E-mail: gerster@uni-mannheim.de; Phone: +49 (0) 621 181-1791; Office: L7, 3-5 Room 232

Firm Dynamics and Economic Growth

[Schedule](#)

Responsible teacher of the module: Prof. Anne Hannusch, Ph.D.
Cycle of offer: irregular
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Microeconomics A + B, Macroeconomics A, Introduction to Econometrics (recommended for empirical papers)
Grading: 40 minutes presentation (including class discussion; 40%), term paper (20 pages excl. references, tables, and figures, 30 pages total; 50%), classroom discussion (10%)
Expected number of students in class: max. 13

Goals and contents of the module: This block seminar will focus on the theory and empirics of modern economic growth. We will follow a micro-to-macro approach, that is, we will study microfoundations for aggregate trends in total factor productivity. Special emphasis will be given to firms and inventors to uncover forces that shape total factor productivity. The main focus of the seminar will be on recent ideas in economic growth theory, including but not limited to:
- Economic Growth and the Data Economy
- Declining Business Dynamism
- Environment and Directed Technical Change
- Inequality, Taxation, and Innovation

Expected competences acquired after completion of the module: At the end of the course, students are able to compare and contrast various theories that link firm decisions to aggregate trends in productivity. Students learn to analyze, summarize, and critically evaluate original articles at the frontier of economic growth theory. The seminar also serves as a bridge towards the Bachelor Thesis. Students learn to develop new and exciting research ideas based on their critical evaluation of the material presented in this seminar. All of these skills are essential for the successful completion of the thesis.

Contact Information: Prof. Anne Hannusch, Ph.D.; Phone: (0621) 181 - 3751; E-mail: hannusch@uni-mannheim.de, Office: L7, 3-5 room P.03, Office hours: by appointment

Gender Pay Gap - Sources and Solutions/**/****

Schedule

Responsible teacher of the module: Prof. Andreas Gulyas, PhD
Cycle of offer: spring semester
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: none
Grading: referee report (approx. 2-3 pages, 30%), presentation (45 min, 50%), classroom discussion (20%);
each 45 min presentation is followed by a 10min general discussion about the paper.
Expected number of students in class: depends on students' choice (max. 13)

Goals and Contents of the Module: The sources behind the gender pay gap are widely discussed among the general public and policy makers. The arguments of this debate are often more ideology based than fact based. A wide body of economic research has tried to identify the sources behind the gender pay gap and studied the effects and efficacies of a number of policies targeted at closing the gender pay gap. The goal of this seminar is to get a solid understanding on the determinants of the gender pay gap, and study which policy instruments have, and which have not proven effective to close the gender pay gap. Topics include discrimination in the labor market, the role of children in shaping income differences, and policies such as pay transparency measures and quotas. In this block seminar, students will present cutting-edge research on these topics.

Competences acquired after completion of the module: In addition to a better understanding of the gender pay gap, students will also practice and improve their presentation skills as well as their ability to critically evaluate the soundness of arguments in the debate around the gender pay gap. Students will present recent research papers about the gender wage gap and are required to write a referee report summarizing the presented paper as well as critically reflecting on the contributions and shortcomings of the paper.

Contact: Prof. Andreas Gulyas, Ph.D., email: andreas.gulyas@uni-mannheim.de

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Introduction to predictive analytics and machine learning

Schedule

Form and usability of the module: elective course for B.Sc. Economics
Responsible teacher of the module: Prof. Krzysztof Pytka, Ph.D.
Cycle of offer: spring semester
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Grundlagen der Ökonometrie
Grading: final report (50%), and the presentation (50%): between 10 and 15 pages for the final report (excluding the code enclosed in the appendix) and 25-minute presentations (including questions)
Expected number of students in class: max. 14

Goals and contents of the module: Statistical learning is a set of methods that allow to study processes that cannot be satisfactorily explained by the existing theories.

Those procedures are particularly useful for analyzing complex datasets with many observations and many variables. This seminar will introduce to the basics of statistical learning with emphasis put on building models that provide the most accurate predictions. Each participant will have to study on her own using materials pre-recorded and shared by me. In those video materials, I will review supervised problems, in which the value of an outcome measure is predicted on the base of a number of input measures. All examples will be implemented in R, an open-source statistical computing language. One of the purposes of the course is to familiarize students with this language, which nowadays is extensively used both in academia and in industry. No programming skills are assumed, and I will start teaching it from scratch. During the seminar the students will present their prediction model built with the use of artificial datasets prepared by me.

Course roadmap:
- Introduction to programming in R.
- Classical econometrics with R. Monte-Carlo simulation. Gauss-Markov theorem revised.
- Statistical Learning. What is it? The trade-off between prediction accuracy and model interpretability. The bias-variance trade-off. Supervised vs. unsupervised learning.
- Resampling methods. Cross-validation and bootstrap.
- Linear model selection and regularization. Subset selection. Shrinkage methods: ridge regression and lasso.
- Regression trees. Random forests.

Expected competences acquired after completion of the module: The students gain knowledge and understanding how modern statistical learning methods differ from classical econometrics. They can use those methods to build predictive models. The students can choose the right method for a given problem. They can write simple programs in R.

Further information: literature:
- Grolemund, G. (2014) "Hands-On Programming with R: Write Your Own Functions and Simulations."
- Matloff, N. (2011) "The Art of R Programming: A Tour of Statistical Software Design."
- James, G., Witten, D., Hastie, T., & Tibshirani, R. (2017) "An introduction to statistical learning: With applications in R."

Contact Information: Prof. Krzysztof Pytka, Ph.D.; email: pytka@uni-mannheim.de; phone: (0621) 181-1817; Office: L7 3-5, room 2.09, Office hours: by appointment.

Media Economics

Schedule

Responsible teacher of the module: Prof. Camille Urvoy, Ph.D.
Cycle of offer: fall semester
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Microeconomics A and B. A basic knowledge of econometrics is preferable as we will study empirical papers, but office hours can also be arranged to answer questions.
Grading: 30% presentation (20 min.) + 50% seminar paper (max. 10 pages) + 20% classroom discussion (10 min.)
Expected number of students in class: max. 13

Goals and contents of the module: The aim of this seminar is to gain a better understanding of how the information is produced and disseminated by media outlets, and how it impacts people down the line. We will first motivate the study of media by exploring the impact of information provision on how it helps voters monitor elected officials, and how elected officials respond to the incentives thus created. We will then consider how to measure media bias, whether media outlets are indeed biased, and if so, what are economic forces at play, i.e., demand and supply of media bias. Then, we will turn to understanding whether people are persuaded by biased reporting, or 'fake news', as well as the resulting effects on real life behaviors such as voting or social distancing. Finally, we will take a deeper dive into what shapes media market. In particular, we will discuss the competition environment and business model of media outlets: how it has been impacted by increased competition, the internet, and social media.

Expected competences acquired after completion of the module: The competences acquired fall mainly into three categories. First, students will gain a general understanding of the role of the media in democratic systems, as well as the changes the sector is currently experiencing. This knowledge is relevant from a practitioner's perspective. It will also inform students on today's research frontier, and what we still need to understand better to tackle inequalities. Second, the papers studied use a variety of methods and some of them make use of recent advances in text analysis to study media content. Students will also study how these methods are used in practice and will learn how to critically evaluate them. Finally, students will also become more familiar with reading empirical research papers and improve their presentation skills.

Further information: Please note that you have to register for this seminar within the common registration week.
Contact Information: Prof. Camille Urvoy, Ph.D.; email: camille.urvoy@uni-mannheim.de,
Office: 208, L7, 3-5.

Topics in Financial Economics**

Responsible teacher of the module: Dr. Andrea Modena
Cycle of offer: once a year
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: undergraduate-level knowledge of Statistics, Micro A + B, and Macro A + B (prerequisite), lecture in Financial Economics (recommended).
Grading: seminar presentation: 30 mins followed by 10 mins for Q&A (1/2), seminar paper: appr. 10 pages (1/2)
Expected number of students in class: 16 (max)

Goals and contents of the module: This course complements the topics discussed in the Financial Economics lecture; in particular, it provides a general introduction to the fundamentals of modern financial theory, focusing on asset pricing and portfolio theory and its relation to the macroeconomy (macro-finance). After an initial and general introduction, students must pick a research paper on selected topics relating to asset pricing, corporate finance, or macro-finance and give a 30 mins presentation to discuss the article, its strengths, and weaknesses. Based on their work and the comments they receive in the presentation, students must write a summary and a referee report of the selected paper (approximately 10 pages). A detailed list of topics and articles will circulate once the seminar spots have been allocated.

Expected Competencies acquired after completion of the module: Students learn to analyse, summarize, and critically discuss original articles at the frontier of current research in financial economics. They improve their skills to communicate complex topics orally and in writing and further their presentation skills. The seminar also serves as a bridge towards the Bachelor Thesis. Students learn to engage with current research papers, critically assess those, and develop their ideas based on their findings – all skills essential for completing the thesis.

Extra information (timing): This block seminar is split into three parts. The first part of the seminar (weeks 1-2, lectures) is dedicated to reviewing some essential topics in financial economics and its connection to the macroeconomy. Students prepare their paper presentation during Part 2 (weeks 3-10, independent work). The instructor will be available for individual meetings throughout this time. Finally, during Part 3, students hold their presentations (30 mins followed by 10 mins for Q&A). Within two weeks after the presentations, students shall hand in their reports.
Contact: Dr. Andrea Modena, andrea.modena@uni-mannheim.de, Office 3.03 in L7, 3-5 (Economics Building)

Topics in Information Economics**

Schedule

Responsible teacher of the module: Andrei Matveenko, Ph.D. / Prof. Dr. Volker Nocke
Cycle of offer: each spring semester
ECTS credits: 6
Teaching method (hours per week): block seminar (2)
Course language: English
Prerequisites: Microeconomics A + B
Grading: presentation (30 minutes including discussion, 40%) and report (2-3 pages, 60%)
Expected number of students in class: max. 15

Goals and contents of the module: Participants of the seminar will choose an article in selected topics relating to Information Economics and give a presentation of the article's content with a focus on its strengths and weaknesses. After the presentations, each student will write a critical review of the presented article, which summarizes and critically discusses it. Topics of the articles can include attention and focusing, search and learning, strategic transition and disclosure of information and global games. A detailed list of topics and associated papers will be circulated once the seminar spots have been allocated.

Expected competences acquired after completion of the module: The students will become familiar with several topics of the recent research related to Information Economics with some focus on Behavioral Economics. They will also improve their critical thinking, presentation, and academic writing skills.

Further Information: Please note that you have to register for this seminar within the common registration week.
Contact person: Andrei Matveenko, Ph.D.; Email: andrei.matveenko@uni-mannheim.de

Additional courses for Economists

University Library

The University Library offers a variety of courses on database research, reference management and research data management, only to name a few. Please find further information on the following homepage: https://www.bib.uni-mannheim.de/en/services/courses-and-tutorials/courses/.