

## **Courses in English Language at the Faculty of Business Administration and Economics**

In each of the following courses, exchange students have the opportunity to obtain ECTS-credits. Prerequisites for obtaining ECTS-credits are a passed written or oral exam at the end of the course (per hour per week: 1,5 or 2 ECTS-credits) and/or a successful completion of a research paper (5 ECTS-credits).

<b>Course:</b>	Economics: Basics II, Output, Employment and Prices
<b>Lecturer:</b>	Prof. Dr. Ulrike Neyer
<b>Program:</b>	Bachelor of Science
<b>Module:</b>	BV02/BV05
<b>Hours per week:</b>	4
<b>ECTS-Credits:</b>	6
<b>Term:</b>	Each Summer Term

### **Aim and Content:**

The aim of this course is to give students a comprehensive knowledge of macroeconomics. By the end of this course the student is expected to be able to discuss competently macroeconomic phenomena as output fluctuations, unemployment and inflation and the possibilities and limits of policy makers to deal with these problems. Brief contents: First, a survey on major macroeconomic variables (GDP, unemployment rate, inflation rate) is given. How are these variables measured, what are their recent trends? Then, four building blocks of macroeconomic models are derived and analyzed: the goods market, the money market, the production function and the labour market. After that, these building blocks are put together to macroeconomic models under different assumptions (for example, sticky versus flexible nominal wages). Within these macroeconomic models the consequences of supply shocks, demand shocks, monetary policy and fiscal policy for output, employment and prices are analyzed. Finally, a short introduction into New-Keynesian macroeconomic models is given.

**Course:** Industrial Economics (Preis- und Wettbewerbstheorie)  
**Lecturer:** Prof. Dr. Justus Haucap & Jun.-Prof. Dr. Tobias Wenzel  
**Program:** Bachelor of Science  
**Module:** BW14  
**Hours per week:** 4  
**ECTS-Credits:** 8  
**Term:** Each Winter Term

**Aim and Content:**

This course provides an introduction to industrial economics and competition policy. The focus lies on competition in imperfectly competitive markets. The first part of the course covers pricing in monopolistic markets (monopoly pricing, durable goods, price discrimination) and in oligopolistic markets (Bertrand competition, Cournot competition, differentiated product markets). Building on this, the second part of the course will discuss the implications for competition policy by considering collusion, merger policy and competition problems arising in vertical market structures.

**Course:** International Strategic Management  
**Lecturer:** Prof. Dr. Christian Schwens  
**Program:** Bachelor of Science  
**Module:** BW 17  
**Hours per week:** 2  
**ECTS-Credits:** 4  
**Term:** Each Summer Term

**Aim and Content:**

This course provides theoretical and practical skills to issues of strategic management in the international context. In addition to the challenges that exist for companies in the international context, foreign market entry strategies are developed. Other key priorities of this course are the formal and informal institutional framework of foreign markets and their impact on companies as well as the strategic positioning of the company in the international environment.

**Course:** Game Theory and Experimental Economics  
**Lecturer:** Jun.-Prof. Dr. Gerhard Riener  
**Program:** Bachelor of Science  
**Module:** BW20  
**Hours per week:** 6  
**ECTS-Credits:** 12  
**Term:** Each Winter Term (1<sup>st</sup> half) and each Summer Term (2<sup>nd</sup> half)

**Aim and Content:**

This module provides an introduction to game theory and experimental economics. The focus is on microeconomic models, connecting to experimental results. The focus is to understand human behavior in interaction with others and formally model it and derive predictions from those models.

The first part of the course deals with game theory, the backbone of the modern positive economics. The second part deals with real human behavior and the ratio of actual behavior to game theory predictions from the first part.

The course is a combination of lecture and hands-on exercises that will be developed in groups. Especially the practical exercises are important because they contribute to the understanding of the presented material and enable the students to formulate hypotheses and later also conduct experiments to test these hypotheses.

<b>Course:</b>	Economics of Innovation
<b>Lecturer:</b>	Jun.-Prof. Dr. Hanna Hottenrott
<b>Program:</b>	Bachelor of Science
<b>Module:</b>	BW 31 (Course 1, 2, 3)
<b>Hours per week:</b>	4 (summer) + 2 (winter)
<b>ECTS-Credits:</b>	12
<b>Term:</b>	Each Summer Term (Course 1 and 2) + Winter Term (Course 3)

**Aim and Content:**

The aim of this course is to provide an introduction to the Economics of Innovation. Course 1 will introduce the fundamental theoretical building blocks to be used in the exercise classes (Course 2). The lecture will discuss some of the prevailing models in the field of Industrial Organization dedicated to the analysis of the incentives and constraints to innovative activities (R&D expenditures) as well their relation with imitation, spillovers, firm size and market structure. The course also comprises a dynamic and knowledge-based view, introducing models involving the direct generation of new knowledge, the catching-up/falling behind dynamics of competition and the role played by market selection between innovative firms. The objective of Course 3 is to apply the acquired knowledge during the summer term to selected topics in the field of innovation research. The students will be asked to write a term paper and to present their work in class.

<b>Course:</b>	Mircoeconomics
<b>Lecturer:</b>	Prof. Dr. Hans-Theo Normann
<b>Program:</b>	Master of Science
<b>Module:</b>	MV03
<b>Hours per week:</b>	4
<b>ECTS-Credits:</b>	6
<b>Term:</b>	Each Winter Term

**Aim and Content:**

This course provides an introduction to content and methods of microeconomic theory for Master students. The course will cover the standard models of market competition, monopoly and oligopoly. Further, we will include an introduction to non-cooperative game theory and the analysis of transactions with asymmetric information. The traditional analysis of individual decision making (consumer and firm) will be covered as well as current approaches to behavioural economics. For all theoretical concepts, applications will be presented. Course requirements include a sound knowledge of intermediate microeconomics.

<b>Course:</b>	Risk Management and Regulation of Financial Institutions
<b>Lecturer:</b>	Prof. Dr. Christoph J. Börner
<b>Program:</b>	Master of Science
<b>Module:</b>	MW03
<b>Hours per week:</b>	2
<b>ECTS-Credits:</b>	4
<b>Term:</b>	Each Summer Term

**Aim and Content:**

The course is designed to give participants a deep insight in risk management from the perspective of financial institutions, espec. banks. The course deals with both market risks and credit risks. Participants will learn how to estimate expected losses and unexpected losses of financial instruments on an instrumental level and on a portfolio-level by discussing important elements of risk measurement. Moreover participants are provided with a deep knowledge of the instruments of risk management. Therefore theoretical and practical aspects are covered. The discussion of risk management is set into interaction with actual regulatory requirements. As the course is part of the master-program participants must have a solid previous knowledge in finance

<b>Course:</b>	International Business Taxation
<b>Lecturer:</b>	Prof. Dr. Felix J. Wurm
<b>Program:</b>	Master of Science
<b>Module:</b>	MW06
<b>Hours per week:</b>	2
<b>ECTS-Credits:</b>	4
<b>Term:</b>	Each Summer Term

**Aim and Content:**

The course addresses master students majoring in "Business Taxation and Tax Management ". It aims to provide an understanding of the taxation of international business activities and international tax planning opportunities. The assertion of

taxation jurisdiction over the same person or transaction by several sovereign countries leads to the issue of double taxation and tax avoidance. Coverage includes methods of double taxation relief and their implementation in national tax law, double taxation treaties and European law. The course moves further to concepts of international tax planning and measures against tax avoidance and discusses the taxation of outbound and inbound investments. Basic knowledge of income and corporate taxation is a prerequisite for this course.

**Course:** Empirical Methods of Financial Market Analysis  
**Lecturer:** Prof. Dr. Albrecht Michler  
**Program:** Master of Science  
**Module:** MW08  
**Hours per week:** 2  
**ECTS-Credits:** 4  
**Term:** Each Summer Term

**Aim and Content:**

This course introduces the empirical and especially econometric techniques that are commonly applied to finance, and particularly to resolve problems in market risk analysis. The main focus is on models, that use time series data, and relatively few formal proofs are given. Every section has numerous empirical examples that are implemented in Excel spreadsheets or in Eviews files. Brief contents: Basic Calculus for Finance; Probability and Statistics; Introduction to Linear Regression; Factor Models; Principal Component Analysis; Classical Models of Volatility and Correlation; Introduction to GARCH Models; Time Series Models and Cointegration.

**Course:** Game Theory  
**Lecturer:** Prof. Dr. Hans-Theo Normann  
**Program:** Master of Science  
**Module:** MW10  
**Hours per week:** 4  
**ECTS-Credits:** 8  
**Term:** Each Summer Term

**Aim and Content:**

This course provides a profound introduction to game theory at an advanced level. We start with reviewing static and dynamic games of complete information. Further, games of incomplete information will be introduced and analyzed. For all theoretical concepts, applications from business and economics but also from every-day life (e.g. sports) and evolutionary biology will be presented. Whereas most game theory is normative, we will also cover behavioral game theory which is about actual behavior of economic agents. We will review experimental evidence on game-

theoretic issues, cover issues like fairness in games, and we will also regularly conduct our own class-room experiments.

**Course:** Industrial Economics  
**Lecturer:** Dr. Irina Suleymanova; Jun.-Prof. Dr. Tobias Wenzel  
**Program:** Master of Science  
**Module:** MW10  
**Hours per week:** 4  
**ECTS-Credits:** 8  
**Term:** Each Summer Term

**Aim and Content:**

The objective of the course is to provide an introduction to industrial economics. We will study the market structure, strategic interaction among firms and the economic outcome. The main purpose is to develop a better understanding of economic reasons and intuitions behind firms' various strategies. We start with the analysis of a wide variety of imperfectly competitive market structures such as monopoly, oligopoly in markets with homogenous and differentiated products. We proceed with the analysis of various strategic actions in non-price dimensions (e.g. product differentiation; advertising; price discrimination,..).

**Course:** Monetary Theory and Policy  
**Lecturer:** Prof. Dr. Ulrike Neyer  
**Program:** Master of Science  
**Module:** MW14  
**Hours per week:** 2  
**ECTS-Credits:** 4  
**Term:** Each Winter Term

**Aim and Content:**

The aim of this course is to give students a comprehensive knowledge of the functioning of monetary and financial markets and of the transmission of monetary policy. The course shall enable students to understand and analyze institutional aspects of monetary and financial markets and the implications of monetary policy decisions. Brief contents: Meaning and Functions of Money; Central Banks and the Conduct of Monetary Policy; Money Demand and Money Supply; Money, Output and Inflation: Money in Macroeconomic Models; Money and the Open Economy, Discretionary Policy and Time Inconsistency, Risk and Term Structure of Interest Rates.

**Course:** European Competition Policy  
**Lecturer:** Prof. Dr. Christian Wey (with TA)  
**Program:** Master of Science  
**Module:** MW15  
**Hours per week:** 4  
**ECTS-Credits:** 8  
**Term:** Each Winter Term

**Aim and Content:**

This course provides an introduction to the economic foundations of competition policy. Students also obtain a basic knowledge of the legal framework which governs competition policy in Europe. Focus topics are: market definition, cartels, mergers and vertical restraints. Game theory is the theoretical basis of modern competition economics. Students will learn how to apply game theoretical concepts to real-world competition policy problems. The course includes basic game theoretical concepts (static and dynamic games, Nash equilibrium and sequential rationality), monopoly and oligopoly theory (Bertrand, Cournot, Hotelling), and aspects of contract theory which play a role in input markets (vertical restraints). Focus areas are supplemented by landmark cases as, for instance, the GE/Honeywell and Microsoft case. Finally, the course also enables students to understand current challenges of European competition policy; in particular, the ongoing debate about the “more economic approach” which contrasts the “structural thinking” with an “effects based” way of analysis.

The main textbook of the course is Motta, M. (2004), *Competition Policy: Theory and Practice*, Cambridge University Press.

**Course:** Advanced Econometrics I: Microeconometrics  
**Lecturer:** Prof. Dr. Tomaso Duso, Prof. Dr. Florian Heiß  
**Program:** Master of Science and PhD  
**Module:** MW23  
**Hours per week:** 4  
**ECTS-Credits:** 8  
**Term:** Each Winter Term

**Aim and Content:**

Advanced Econometrics I - Microeconometrics is designed to help master and doctoral students to be prepared for doing empirical econometric analyses using individual level data of persons, households or firms. Basic courses in Statistics and Econometrics are prerequisites; introductory courses in Economics are recommended, but not required. The course will provide an up-to-date overview on the most commonly used microeconomic methods. Topics include a review of linear regressions, experimental versus non-experimental data, static and dynamic

panel data methods, maximum likelihood estimation, non-linear models for binary, multinomial and count outcomes, and non- and semiparametric estimation.

This course is part of the module *Advanced Econometrics (MW23)*. The second part of the module is the course *Advanced Econometrics II: Empirical Industrial Organization*, which is held during the summer term.

**Course:** Behavioral Economics  
**Lecturer:** Jun.-Prof. Dr. Irina Suleymanova  
**Program:** Master of Science  
**Module:** MW24  
**Hours per week:** 2  
**ECTS-Credits:** 4  
**Term:** Each Winter Term

**Aim and Content:**

The aim of the course is to provide an introduction into behavioral economics and analyze its implications for industrial organization. The course consists of the three parts. In the first part we will learn experimental evidence on the actual human behavior, which shows that the latter can differ from the standard rational behavior and can be influenced by cognitive, social, emotional and other factors, which are often not taken into account in standard economic models. For example, we will consider experimental evidence on ultimatum bargaining behavior, consumer choices in the presence of shrouded attributes; people's choices among alternatives involving risk. In the second part we will learn theories of human decision-making, which incorporate that experimental evidence (prospect theory, behavioral theory of ultimatum bargaining, theory of reciprocity). Finally, in the third part we will consider the implications of consumer behavior influenced by cognitive factors for firms' strategies and competition. For example, we will analyze whether consumer myopia can lead to firms shrouding some product attributes.

**Course:** Entrepreneurial Finance I: Venture Capital & Private Equity  
**Lecturer:** Prof. Dr. Eva Lutz  
**Program:** Master of Science  
**Module:** MW 27 (Course 1)  
**Hours per week:** 2  
**ECTS-Credits:** 4  
**Term:** Each Winter Term

**Aim and Content:**

The aim of this course is to give a profound introduction to venture capital and private equity. The focus is on understanding the economics of venture capital and private

equity funds taking into account the perspective of fund investors (limited partners) and fund managers (general partners). Furthermore different performance measurement techniques applied in venture capital as well as private equity are presented and critically assessed. Analyzing venture capital and private equity transactions regarding deal origination, due diligence, investment structuring, post-deal development and exit options are also subject of this course.

Through in-depth case analysis and discussion, students are able to directly apply the theoretical content in a real-life context. Guest lectures from practitioners help students to gain further insights on selected topics.

**Course:** Entrepreneurial Finance II: Financial Management  
**Lecturer:** Prof. Dr. Eva Lutz  
**Program:** Master of Science  
**Module:** MW 27 (Course 3)  
**Hours per week:** 2  
**ECTS-Credits:** 4  
**Term:** Each Summer Term

#### **Aim and Content:**

The aim of this course is to describe different financial instruments (including equity and debt) for entrepreneurial firms and analyze capital structure decisions. Furthermore the levers of working capital management are explained and differentiate between different types of financial forecasting are presented. These include cash budgets, real vs. nominal forecasting, sales forecasting and cost forecasting. Students learn how to build an integrated financial model using these techniques.

Through in-depth case analysis and discussion, students are able to directly apply the theoretical content in a real-life context. Guest lectures from practitioners help students to gain further insights on selected topics.

**Course:** International Trade  
**Lecturer:** Prof. Dr. Jens Suedekum  
**Program:** Master of Science  
**Module:** MW28  
**Hours per week:** 6  
**ECTS-Credits:** 12  
**Term:** Each Winter Term

#### **Aim and Content:**

The aim of this course is to give students a comprehensive knowledge of the field of international trade. Starting with an overview of neoclassical trade theory, we quickly move to a detailed analysis of the "new" theory of international trade based on imperfect competition and increasing returns to scale. After introducing the basic models in this literature, we deal with recent topics such as firm heterogeneity,

foreign direct investment and multinational enterprises, trade and factor flows, agglomeration, and the organization of international vertical value chains. The goal of this course is to bring students close to the international research frontier in International Trade Theory.

Düsseldorf, July 28, 2014