UNIVERSITY OF MANNHEIM

Department of Economics

2019

Course Catalog
Fall Semester 2019

MASTER OF ECONOMICS

Version: August 6, 2019

Contents

Preparatory Module in Mathematics

Module number and title	E600 Mathematics
Form and usability of the module	Optional preparatory module for M.Sc. Economics
Responsible teacher of the module	Martin Reinhard
Cycle of offer	Each fall semester
Course language	English
Prerequisites	Basic knowledge in logic and set theory; I will assume that you are well acquainted with basic logic and naïve set theory though. We will go through some exercises on these topics in the first lecture and you will get the most out of it if you are well prepared.
Goals and contents of the module	This course is a preparatory math course. I will thus try to make sure that you do not start the program without mastering what can be considered as the most basic mathematical concepts for a graduate student in economics. The plan therefore is as follows: • Motivation and fundamental concepts (sets, functions) • Introduction to vector spaces • Introduction to matrix algebra • Multivariate calculus and integral calculus • Optimization • If there is time: stochastics and statistics Order of content may be subject to change, the final outline will be announced in the first session. While the lecture sessions will be concept- rather than proof-oriented, by the end of the course, at the very least you should be comfortable with mathematical notation and logic, and should know that you need not be scared of formal proofs. At the same time, while the exercises will not be of the "cookbook" form, they should serve as a good warm-up for what will follow in the first term master courses.
Expected competences acquired after completion of the module	By the end of the course, the students should have a solid understanding of the most basic mathematical concepts for a graduate student in economics. Participants develop and intuition for basic mathematical constructs (for example derivatives, integrals and matrices), get familiar with mathematical notation and logic (such as distinguishing between axioms and theorems, following formal proofs), and learn when and how to apply the main theorems covered in this course (in particular Lagrange theorem).

Further information	This is an intensive course and will take place in the week prior to the beginning of the semester. The course will consist of lectures and exercise sessions, which take place on August 26-30 between 09:00-16:30 in L9 1-2 001. Despite these official hours, we shall be flexible to divide our time between lectures, exercise and breaks each day so as to best suit our needs. As in most courses, you will need to put some extra time into preparing the exercises for the next session on your own. Problem sets will be handed out during the lecture and most of them will be discussed during the next days. I expect every participant to actively contribute to the discussions. If you feel you need some additional readings, you may want to have a look at Carl P. Simon / Lawrence Blume (1994): Mathematics for Economists, 1st Edition. W.W. Norton & Company, but there are many other good books around and I recommend you to have a look at many of them before you buy any to find one which best suits your personal needs.
Expected number of students in class	40
Contact information	Name: Martin Reinhard; Email: mareinha@mail.uni-mannheim.de Name: Sebastian Herdtweck; Email: econgrad@uni-mannheim.de

Core Modules

Module number and title	E601 Advanced Microeconomics
Form and usability of the module	Core course for M.Sc. Economics
Responsible teacher of the module	Prof. Ernst-Ludwig von Thadden / Lily Ling Yang, Ph.D.
Cycle of offer	Each fall semester
ECTS credits	10
Teaching method (hours per week)	Lecture (4) + exercise (2)
Workload	300 hours in total; 63 hours class time and 237 hours for independent studies and exam preparation
Course language	English
Prerequisites	Students are expected to have solid mathematical skills at the level reviewed in preparatory module E600 Mathematics. Students without these skills are expected to prepare prior to the start of the program and to attend E600 Mathematics.

Grading	Final exam (120 min)
Goals and contents of the module	The course is a foundational course for the whole master program, as all theories and applications of modern economics are based on microeconomic foundations. The course has two objectives. First, it provides a self-contained advanced introduction to the core concepts, notions, and tools of much of microeconomics, such as rational individual decision making, general equilibrium, and strategic interactions. Second, it acquaints the students with the formal reasoning and economic intuition behind modern economic analysis. The course covers the following broad areas: • Consumer and producer theory • General equilibrium and welfare • Games of complete information • Games of incomplete information
Expected competences acquired after completion of the module	Upon successful completion of the course, students will know and be able to apply the basic concepts of microeconomic theory. In particular, they will be able to use the formal mathematical tools necessary for understanding economic research and for analyzing problems in economics and other social sciences. With these conceptual and formal competences, students will be able to critically evaluate economic arguments and conduct and communicate their own research in microeconomics and related areas.
Further information	A list of textbooks will be announced at the start of the course. The following two books cover all topics discussed in the course and much more: • Mas-Colell, Andreu, Michael Whinston, Jerry Green: Microeconomic Theory, Oxford University Press, 1995. • Varian, Hal: Microeconomic Analysis, Norton, New York and London, 1992. The mathematics needed for this and other courses in the program is covered, e.g., by: • Simon, Carl and Lawrence Blume: Mathematics for Economists, Norton, New York and London, 1994. • Hammond, Peter and Knut Sydsaeter: Essential Mathematics for Economic Analysis, Pearson Education, London, 2002.
Expected number of students in class	65
Contact information	Name: Ernst-Ludwig von Thadden; Phone: (0621) 181-1914; Email: vthadden@uni-mannheim.de; Office: 3.19, VWL-Building; Office hours: upon appointment. Name: Lily Ling Yang; Phone: (0621) 181-3059; Email: lily.yang@uni-mannheim.de; Office: 3.42, VWL-Building; Office hours: upon appointment.

Module number and title	E602 Advanced Macroeconomics
Form and usability of the module	Core course for M.Sc. Economics
Responsible teacher of the module	Prof. Krzysztof Pytka, Ph.D
Cycle of offer	Each fall semester
ECTS credits	10
Teaching method (hours per week)	Lecture (4) + exercise (2)
Workload	300 hours in total; 63 hours class time and 237 hours for independent studies and exam preparation
Course language	English
Prerequisites	Good working knowledge of calculus (constrained optimization, multivariate Taylor expansion, geometric series)
Grading	Written midterm exam (60min, 50%), final exam (60min, 50%)
Goals and contents of the module	The course familiarizes students with the essential concepts of modern macroeconomic theory at an advanced level. Apart from traditional analysis of business-cycle fluctuations, a particular focus will be placed on learning how to use formal micro-founded models to study and understand cross-sectional heterogeneity of households, one of key components for the most state-of-the-art macroeconomic models nowadays. During the course students will also learn the necessary techniques to solve dynamic programming models using MATLAB. Course roadmap: 1. Introduction to the methodology. Scientific method in Macroeconomics. Ockham's razor. Lucas critique. 2. Building block of models. Preferences, production. Optimization problems of agents. 3. Permanent-income hypothesis. Lifecycle consumption. Permanent vs. transitory shocks. Public pensions in life-cycle economies. Consumption search and life-cycle prices. Consumption retirement puzzle. 4. Fiscal stimulus programs. Wealthy hand-to-mouth households. 5. Public debt in overlapping-generations economies. 6. (If time permits) Solow growth model vs. Piketty growth model. 7. Introduction to dynamic programming. 8. Optimal stochastic growth model. 9. McCall labor search.
Expected competences acquired after	Completion of this course is a core requirement for our Master programs in Economics. It prepares students to successfully participate in advanced field courses offered in this program. Together with the companion courses in

completion of the module	microeconomics and econometrics, this course will enable students to develop their own research agenda for the Master program as well as a PhD program that they may want to pursue subsequent to this Master program. Having completed these courses, students will feel comfortable reading journal articles at the frontier of modern economic research. A particular focus will be placed on obtaining technical skills, i.e. log-linearization techniques, solving linear rational expectations models, etc.
Further information	The mandatory textbook chapters and articles will be announced in the lecture.
Expected number of students in class	65
Contact information	Name: Prof. Krzysztof Pytka, PhD; Phone: (0621) 181-1817; Email: pytka@uni-mannheim.de; Office: L7 3-5, room 2.09; Office hours: by appointment.

Module number and title	E603 Advanced Econometrics
Form and usability of the module	Core course for M.Sc. Economics
Responsible teacher of the module	Prof. Markus Frölich
Cycle of offer	Each fall semester
ECTS credits	10
Teaching method (hours per week)	Lecture (4) + exercise (2)
Workload	300 hours in total; 63 hours class time and 237 hours for independent studies and exam preparation
Course language	English
Prerequisites	Undergraduate level of econometrics
Grading	Final exam (120 min)
Goals and contents of the module	The goal of the module is to offer advanced treatment to econometric theory and to serve as the gate way to further advanced theoretical and applied econometric modules offered in the economics graduate program at the Department of Economics in Mannheim. The module offers a revision of undergraduate level econometrics before moving on to extensive coverage of large-sample theory and some organizing estimation principles such as GMM and Extremum estimators.

	Asymptotic properties of these estimators are also the focus of the module as well as non-linear models and the treatment of serial correlation.
Expected competences acquired after completion of the module	On successful completion of the module, students are expected to attain the following competences: • Attain advanced theoretical knowledge in econometrics in the specific topics the module covers at a high technical and mathematical level. • Be familiar with current theories and recent developments in the specific topics of focus for the module. • Attain a higher/advanced level of analytical capability. • Be in a position to take on follow-up advanced theoretical and applied econometrics modules. • Attain the level of competence that permits independent undertakings in search of new knowledge in the specialist areas the module covers. • Attain the level of competence required to carry out (theoretical) research-oriented projects independently. • To be in a position to exchange information, ideas, and solutions with experts of the field on a scientific level as well as with laymen. • To be able to communicate and to work effectively and efficiently with people and in groups. • Graduates are able to communicate precisely in the English specialist language.
Further information	Recommended textbooks: • Wooldridge (2010): Econometric Analysis of Cross Section and Panel Data. MIT Press. • Heij, De Boer, Franses, Kloek, and Van Dijk (2004): Econometric Methods with Applications in Business and Economics. Oxford University Press. • Kirchgässner, Wolters (2007): Introduction to Modern Time Series Analysis. • Kirchgässner, Wolters (2006): Einführung in die moderne Zeitreihenanalyse.
Expected number of students in class	65
Contact information	Name: Prof. Dr. Markus Frölich; Email: froelich@uni-mannheim.de; Office: L7, 3-5, 1st floor, room 114

Compulsory Modules for the Competition and Regulation Economics Track

Module number and title	E5060 Interdisciplinary Competition and Regulation Seminar
Form and usability of the module	Compulsory course for M. Sc. Economics with specialization Competition and Regulation Economics, Compulsory course for Master in Competition and Regulation Law (LL.M.)
Responsible teacher of the module	Prof. Dr. Volker Nocke
Cycle of offer	Each fall semester
ECTS credits	5
Teaching method (hours per week)	Seminar (2)
Workload	150 hours in total; 21 hours class time and 129 hours for independent studies and exam preparation
Course language	English
Prerequisites	E505 for Economics students
Grading	Written report (50%), presentation (30%), class room discussion (20%)
Goals and contents of the module	In this seminar economics and law students will form mixed teams to analyze competition cases as well as regulatory proposals from a law and economics perspective. These case teams will take the perspective of the different parties involved and present their line of argument in class.
Expected competences acquired after completion of the module	Students learn to read, present, and critically evaluate cases. Students in economics will also improve their communication skills regarding the practice of competition law.
Further information	-
Expected number of students in class	15
Contact information	Name: Prof. Dr. Martin Peitz; Email: martin.peitz@gmail.com; Office: L7, 3-5, 3rd floor, room 330

Elective Modules: Lectures

Module number and title	E504 International Trade and Tax Policy Analysis
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Dr. Eckhard Janeba
Cycle of offer	Irregular
ECTS credits	7.5
Teaching method (hours per week)	Lecture (3)
Workload	225 hours in total; 31.5 hours class time and 193.5 hours for independent studies and exam preparation
Course language	English
Prerequisites	For Economics students: E601-603 (or equivalent); for MMM and Business Mathematics students: Business Economics I and II or equivalent
Grading	Final exam (120 min, 40%), short research proposal and presentation (40%), problem sets (group work, 20%)
Goals and contents of the module	This class deals with the role of trade cost and taxes for economic activity in open economies. The class is broad in terms of topics covered and comprises theoretical and empirical approaches and pays attention to institutional details and their development. At the same time, coverage of topics is selective in order to focus on interesting and relevant policy issues. A list of topics includes but is not limited to the following: Globalization and Inequality: Historical and Current Perspectives, Attitudes toward Globalization and Brexit decision, Gravity Equation with an application to trade in cultural goods, Regional Trade Agreements and TTIP, Taxation and labor mobility, International Tax Evasion and Tax Planning, Bilateral Investment Treaties and Investor State Dispute Settlement.
Expected competences acquired after completion of the module	Understanding of current theoretical and empirical literature on trade and tax policy; ability to critically assess policy debates on globalization; familiarity with standard theoretical trade models and important data sets; support thinking about Master thesis topic.
Further information	-
Expected number of students in class	15

Contact information	Name: Prof. Dr. Eckhard Janeba; Phone: (0621) 181-1795; Email: janeba@uni-mannheim.de; Office: L 7, 3-5, room 229

Module number and title	E526 Development Economics
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Dr. Katja Kaufmann
Cycle of offer	Once (fall semester)
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 hours in total; 21 hours class time and 129 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (90 min, 90%) and class room discussion (10%)
Goals and contents of the module	The purpose of this course is to provide students with analytical and empirical tools that enable them to understand the functioning of markets and institutions in Less Developed Countries (LDCs). The methodological approach emphasizes the role of information and incentives in examining from a microeconomic point of view how LDCs cope with market imperfections. Particular emphasis is placed on program evaluation and on the empirical analysis of education, health and microcredit policies. For each topic, recent theoretical contributions are proposed and compared to existing empirical evidence, in order to train the student to develop a research process that goes from the formulation to the test of hypotheses. Course content: 1. Introduction to the course 2. Program Evaluation: Theory 3. Program Evaluation: Applications 3.1 Education Programs and Policies in Developing Countries 3.2 Health Policies in Developing Countries 4. Economics of the Family 5. The Informal Sector 6. Political Economy Aspects
Expected competences acquired after completion of the module	Students learn how to formulate hypotheses based on economic theory and how to empirically test these hypotheses using up-to-date microeconometric methods (such as program evaluation methods).

Further information	List of papers discussed in class: • Attanasio, O. and Kaufmann, K. (2014) "Education Choices and Returns to Schooling: Mothers' and Youths' Subjective Expectations and their Role by Gender", Journal of Development Economics. • Brollo, F., Kaufmann, K. and E. La Ferrara (2015) "Learning about the enforcement of conditional welfare programs: Evidence from Brazil", IGIER working paper. • Duflo, E. (2002), "Empirical methods", mimeo, MIT. (http://web.mit.edu/14.771/www/emp_handout.pdf) • Duflo, E. (2001) "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment", American Economic Review, 91(4), 795-813. • Duflo, E. (2003), "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation", World Bank Economic Review, 17, 1-25. • Galiani, S., Gertler, P., Schargrodski, E. (2005) "Water for Life: The Impact of the Privatization of Water Services on Child Mortality in Argentina", Journal of Political Economy, 113, 83-120. • Kaufmann, K., Messner, M. and A. Solis (2015) „Elite higher education, the marriage market and the intergenerational transmission of human capital", SSRN working paper. • Miguel, E. and Kremer, M. (2004) "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities, Econometrica, 72(1), 159-217. Schultz, P. (2004), "School subsidies for the poor: evaluating the Mexican Progresa poverty program", Journal of Development Economics, 74(1), 199-250.
Expected number of students in class	15
Contact information	Name: Prof. Dr. Katja Kaufmann; Email: kaufmann@vwl.uni-mannheim.de

Module number and title	E571 Monetary Theory and Policy
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Mewael F. Tesfaselassie, Ph.D.
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Lecture (2)

Workload	150 hours in total; 21 hours class time and 129 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (120 min, 70%) + assignments (30%)
Goals and contents of the module	The course introduces students to main topics in monetary theory and policy. The course presents alternative theories of why money and monetary policy matter for the real economy, and describes the design and implementation of monetary policy in relation to advanced economies.
Expected competences acquired after completion of the module	Students will be able to grasp the conceptual issues behind practical challenges in monetary policy facing modern central banks, to use models as well as intuition to understand and seek solutions to those challenges.
Further information	Reading: selected chapters of Carl. E. Walsh: Monetary Theory and Policy. Fourth Edition, The MIT Press.
Expected number of students in class	10
Contact information	Name: Mewael F. Tesfaselassie, Ph.D.; Email: mewael.tesfaselassie@uni-mannheim.de

Module number and title	E5008 Economic and Financial Market Policy
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Dr. Hans Peter Grüner
Cycle of offer	Once
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 hours in total; 21 hours class time and 129 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)

Grading	First draft of slides for case presentation (10%), case presentation (30%), and final exam (60 min, 60%)
Goals and contents of the module	This course offers an introduction to several important economic policy questions that are related to financial markets. I present basic analytical instruments and provide an overview of some fundamental results from general equilibrium theory. Based on this, we study why financial markets are needed in practice. We analyze in detail the role of financial intermediaries and study cases in which financial markets fail to work properly and we discuss appropriate policy responses. The last sessions are devoted to the analysis of fiscal and monetary policy measures that may affect financial markets and to the design of a new financial and economic order in Europe. Course Structure: 1. Analytical instruments/ basic results 2. The role of financial intermediaries 3. Financial market imperfections 4. Fiscal sustainability 5. Monetary policy institutions 6. Towards a consistent European economic policy framework
Expected competences acquired after completion of the module	Understand role of financial markets, regulatory institutions and policy interventions. Perform individual literature research on policy related issues and present major insights.
Further information	Students who are not enrolled in the MSc program in Economics at the University of Mannheim can apply for this course via lswipol@vwl.uni-mannheim.de by August 31. They will be notified about admission after the first lecture. Number of case presentations: 4 Maximum number of students: 16, selection by lottery if necessary.
Expected number of students in class	15
Contact information	Name: Prof. Dr. Grüner; Phone: (0621) 181-1886; Email: gruener@uni-mannheim.de; Office: L7, 3-5, room 2-06

Module number and title	E5024 Poverty and Inequality
Form and usability of the module	Elective course for M.Sc. Economics

Responsible teacher of the module	Esther Heesemann, Marc Gillaizeau
Cycle of offer	Irregular
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)
Workload	210 hours in total; 31.5 hours class time and 178.5 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent), knowledge in development economics is helpful.
Grading	Final exam (90 min, 75%) and presentation (30 min, 25%)
Goals and contents of the module	The course will introduce students to the main concepts of poverty and inequality measurements and the critical links between poverty and inequality and economic growth. Students will get an overview on theories of justice, methodological aspects of poverty & inequality measurement, effects of inequality on socio-economic outcomes, gender inequalities, inequality and poverty in rich countries as well as development policy targeting poverty. The course will focus on low- and middle-income countries. It is structured as follows: 1. Introduction 2. Long Run Determinants of Growth 3. Concepts and Measurements of Poverty I 4. Concepts and Measurements of Poverty II 5. Poor Economics 6. Pro-Poor Growth 7. Concepts and Measurements of Inequality 8. Inequality and Growth 9. Inequality and Gender 10. Inequality and Health 11. Wealth and Economic Mobility 12. Poverty and Inequality in High-Income Countries 13. Recap
Expected competences acquired after completion of the module	The students become acquainted with the topics in poverty and inequality and learn to critically review and discuss empirical studies in the field.
Further information	-
Expected number of students in class	25

Contact information	Name: Esther Heesemann; Email: heesemann@uni-mannheim.de; Office: L7, 3-5, 103; Office hours: on request via email Name: Marc Gillaizeau; Email: gillaizeau@uni-mannheim.de; Office: L7, 3-5, 103; Office hours: on request via email

Module number and title	E5026 Programming in Stata
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Dr. Ingo Steinke; Dr. Atika Pasha
Cycle of offer	Each fall semester
ECTS credits	9.5
Teaching method (hours per week)	Lecture (3) + exercise (1)
Workload	285 hours in total; 42 hours class time and 243 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (90 min)
Goals and contents of the module	Although Stata already offers a large number of econometric tools, novel approaches are often not available and have to be implemented by users. This course offers an introduction to advanced programming in Stata. Since comparatively few people know how to do so, Stata programming skills can be a competitive advantage. The lecture will start with an introduction to efficiently written do-files (including data processing). We will look at and discuss different data types. In hands-on sessions students will be taught how to prepare the data for analysis. Variables will be generated and their distributions explored; data will be merged; and regression results will be critically discussed. Moreover, in this course students will learn how to implement new commands for Stata and to conduct Monte Carlo simulations. These are important for verification of implementations and are used as a very important tool to analyze the small sample properties of estimators and to complement the theoretical properties of estimators making them an integral part of econometric analyses. We will also touch upon Stata's matrix programming language Mata, non-linear optimization, e.g. ML estimation and bootstrap methods.
Expected competences	Students will be able to program quantitative methods using Stata independently. They are able to use Stata and Mata as programming

acquired after completion of the module	languages and understand the standard syntax and the grammar of the languages. They will also be able to understand commands in Stata and edit these accordingly. Knowledge won from this module can be applied to various records. Students are capable of automatizing analysis and working efficiently. In addition to that, they will be able to conduct Monte Carlo simulations and interpret and use the results to estimate the quality of the estimation procedure. They can generate samples from a variety of distributions. Through Monte Carlo simulations, students will have a better comprehension of the uncertainty and quality of the estimation and test procedures.
Further information	Recommended literature: Cameron/ Trivedi (2009). Microeconometrics using Stata. Stata Press.
Expected number of students in class	40
Contact information	Name: Dr. Ingo Steinke; Phone: (0621) 181-1940; Email: isteinke@rumms.uni-mannheim.de Name: Dr. Atika Pasha; Phone: (0621) 181-1843; Email: pasha@uni-mannheim.de

Module number and title	E5040 Impact Evaluation
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Dr. Markus Frölich
Cycle of offer	Each fall semester
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)
Workload	270 hours in total; 42 hours class time and 228 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (120 min)
Goals and contents of the module	Preliminary schedule: In this course we will cover impact evaluation methods as well as models for survey methodology. Topics will include counterfactual outcomes, heterogeneous treatment effects, (propensity) score matching, differences in differences, instrumental variables designs,

	randomized control trials, regression discontinuity design and various methods for collecting primary data. More details will follow.
Expected competences acquired after completion of the module	Students become acquainted with modern methods in impact evaluation.
Further information	-
Expected number of students in class	20
Contact information	Name: Anja Dostert; Phone: (0621) 181-1920; Email: dostert@uni-mannheim.de; Office: L7, 3-5, room 1.21/1.22

Module number and title	E5064 Empirical Methods in Competition Policy
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Dr. Helena Perrone
Cycle of offer	Each fall semester
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 hours in total; 21 hours class time and 129 hours for independent studies and exam preparation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (120 min, 70%) + assignments (30%)
Goals and contents of the module	The objective of the course is to introduce students the empirical analysis of market power and applications to competition policy. The first part of the course will cover the main methods to measure market power, such as the identification of conduct and estimation of demand systems with differentiated products. The second part will provide competition policy applications, including empirical approaches to market definition, methods to evaluate the impact of mergers, methods to identify cartels and estimate cartel damages, and analysis of anticompetitive effects of vertical restrictions. The material is illustrated with several European or U.S. cases.

	In contrast with the Empirical Industrial Organization course, this course is more focused on the practice of competition policy rather than research.
Expected competences acquired after completion of the module	The students will get familiarized with the main techniques used to measure market power and identify cartels, as well as to evaluate non-competitive behavior of oligopolistic firms. They will be able to apply these techniques in different competition cases and also evaluate and identify weakness and strength in competition studies. Furthermore, students will develop the skill to adapt and extend the empirical techniques presented to specific cases in which there is limited time and data availability.
Further information	The reading list for this class is composed of a number of recent academic articles and competition cases.
Expected number of students in class	12
Contact information	Name: Helena Perrone; Email: helena.perrone@uni-mannheim.de

Module number and title	E5065 Health Economics
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Cristina Bellés-Obrero, PhD / Katharina Richert, PhD
Cycle of offer	Each fall semester
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)
Workload	210 hours in total; 31.5 hours class time and 178.5 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Referee report: written report (15%) and presentation (15%) Research proposal: written paper (35%) and presentation (25%) Discussion of research proposal of other student (10%)
Goals and contents of the module	This course is intended to provide an overview of the frontier research on the evaluation of public programs that deal with issues related to determinants of health and health care delivery. We will start the course analyzing some of the theoretical models of health and healthcare. We will then revise and evaluate some of the main empirical findings in the

	literature, focusing on the identification and causal inferences used in the different studies. The specific topics covered include: the human capital model, human capital formation, unhealthy behaviors, global health, and health care delivery.
Expected competences acquired after completion of the module	Students will have a comprehensive knowledge of the most relevant issues and methods used in health economics. Moreover, students will be able to apply different microeconomic models for the analysis of health and health care issues. Students will be able to identify and critically evaluate different health policies or interventions.
Further information	-
Expected number of students in class	20
Contact information	Name: Cristina Bellés-Obrero; Phone: (0621) 181-1840; Email: cbelleso@mail.uni-mannheim.de; Office: 326

Module number and title	E5070 Economics of Social Insurance and Labor Market Policies
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Han Ye
Cycle of offer	Each fall semester
ECTS credits	7.5
Teaching method (hours per week)	Lecture (3)
Workload	225 hours in total; 31.5 hours class time and 193.5 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent), experience with statistical software such as Stata is helpful.
Grading	Final exam (90 min, 60%), problem sets (30%), in-class exercise (10%)
Goals and contents of the module	This course focuses on the role of public policy and government regulation in the labor market using the tools of applied economics. The overarching theme of the course will be to consider how public policies influence labor market outcomes such as employment, wages, and the distribution of income. It covers topics the impact of public policies such as social welfare programs, taxation, income transfer programs, minimum wage laws; and the

	impacts of mandated employer benefits such as health insurance, unemployment insurance and public pension insurance. The class will teach some basic econometrics and most problem sets involve analyzing data in the software package Stata.
Expected competences acquired after completion of the module	The goal of the course is to provide a thorough understanding of central concepts in social insurance and public policies, learn mathematical models to clarify economic interactions and problems and to provide an introduction into empirical research in public policy.
Further information	-
Expected number of students in class	15
Contact information	Name: Prof. Han Ye, Ph.D., Email: han.ye@uni-mannheim.de, Office: L7, 3-5 room 223

Module number and title	E5076 Topics in Time Series Analysis
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Dr. Mehdi Hosseinkouchack
Cycle of offer	Irregular
ECTS credits	9
Teaching method (hours per week)	Lecture (2) + exercise (2)
Workload	270 hours in total; 42 hours class time and 228 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (120 min, 70%) and assignments (30%)
Goals and contents of the module	This module discusses the following topics: 1. Univariate time series analysis – ARMA – Forecasting 2. Unit root testing 3. Spectral analysis 4. Long Memory and fractional integration 5. Conditional heteroscedasticity & stochastic volatility models 6. Panel Unit root testing This module is designed for Master students who already have some heard econometrics courses at the Bachelor's level and have a good knowledge on

ordinary least squares and would like to delve into the world of time series analysis, possibly assume quantitative roles in financial industry or research centers in central banks or similar institutes. Those participants who would like to continue their studies at a PhD level will also benefit from this course. The course starts with a solid discussion on univariate time series models with a clear focus on the dynamics behind the well-known models for serial correlations, name Autoregressive Moving Average models [ARMA]. We then discuss forecasting time series, in details, both on theoretical and on applied grounds. We then delve into the realm of nonstationary time series, discussing how to tell stationary time series from non-stationary ones apart. Unit root testing is in particular important when assuming forecasting tasks and of course, when it comes to the analysis of macroeconomics or financial series. Discussing unit root testing, further, opens a natural path to follow towards the analysis of co-movements and the discussion of spurious regressions (which will just be briefly touched on but is out of the scope of this module). We will also discuss spectral analysis for time series that is aimed at detecting cyclical movements in time series. Long memory processes make for our next fruitful topic in this course. These processes play an important role for modeling time series whose temporal dependence dies out very slowly. After briefly discussing stochastic processes, we will discuss conditional heteroscedasticity and stochastic volatility models as our next topic. These are well-known models for time-varying variances, which are intrinsic to most financial series. The last topic we cover in this course is an extension of univariate unit root tests to panel data. Panel unit root tests are easy to trace in most international macroeconomic and international finance applications and in fact their name speaks for their relevance in such frameworks since the participants have already come to learn about unit root tests and their relevance for quantitative analysis. The course includes examples on each topic, analyzing different problems using a statistical software.

Expected competences acquired after completion of the module

Upon completing this course, the students will have a deep understanding of many important tools in time series analysis as well as topics in panel data analysis. The course has both applied and theoretical flavors and is meant to prepare the participants to assume graduate level quantitative roles and to possibly continue their studies at a PhD level as well. In particular,

- the participants will grasp the ideas behind the dynamics of forecasting models using Autoregressive Moving Average models;
- the participants will learn how to detect seasonal behaviors in time series;
- the participants will learn what unit root tests are and will be able to apply such tests in respective frameworks where the explosive behavior of times series shall be taken care of properly;
- the participant will learn models for time series with quite persistent autocorrelations, e.g. U.S. unemployment rate, and exhibit the so-called long memory;

	• the participants will learn how to model volatility for financial time series; • the participants will finally learn how to apply unit root tests in a panel data framework and will be able to distinguish between different testing procedures and merits of each; • the participants will learn to conduct their analyses based on the methods discussed above using a statistical software.
Further information	References used for this course are • Peter J. Brockwell and Richard A. Davis (1996) Introduction to Time Series and Forecasting, Springer. • In Choi (2015), Almost all about unit roots, Cambridge University Press. • James D. Hamilton (1994), Time Series Analysis, Princeton. • Uwe Hassler (2016), Stochastic Processes and Calculus: an elementary introduction with applications, Springer.
Expected number of students in class	20
Contact Information	Name: Dr. Mehdi Hosseinkouchack; Email: hosseinkouchack@wiwi.uni-frankfurt.de

Module number and title	E5078 Global Health
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Esther Heesemann
Cycle of offer	Irregular
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)
Workload	210 hours in total; 31.5 hours class time and 178.5 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (90 min, 75%) and presentation (25%)
Goals and contents of the module	The course will introduce students to the main concepts of the global health and the critical links between health and economic development. Students will get an overview of the determinants of health, how health status is measured and the current discussion in the field of global health. Students

	will also review the burden of disease, risk factors, and intervention to improve global health issues. The course will focus on low- and middle-income countries and on the health of the poor. It is structured as follows: 1. Introduction 2. Health and Development 3. Development and Health 4. The Global Burden of Disease 5. Health Financing and Health systems 6. Health Behavior I 7. Health Behavior II 8. Social Networks and Health 9. Environment and Health 10. Nutrition 11. Maternal and Reproductive Health 12. Child Health and Development
Expected competences acquired after completion of the module	The students become acquainted with the topics in global health and learn to critically review and discuss empirical studies in the field.
Further information	-
Expected number of students in class	20
Contact information	Name: Esther Heesemann; Email: heesemann@uni-mannheim.de

Module number and title	E5086 Chinese Economy
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Lei Li, Ph.D.
Cycle of offer	Each fall semester
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 hours in total; 21 hours class time and 129 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (60 min, 40%), assignments (30%), presentation (30%)
Goals and contents of the module	Over the past few decades, China has undergone a spectacular economics transformation. It is the largest manufacturing economy, the largest trading

	nation, and one of the fastest-growing consumer markets. In this course, we will cover topics related to the economic development of China. Our goal is to provide an introduction to a rich set of topics related to the economic development of China and to outline future research questions. A tentative list of topics includes: understanding the composition of GDP, the evolution of labor markets, the evolution of financial markets, and globalization. We will draw on some recent academic papers from the fields of macroeconomics, economic growth, labor economics and international trade.
Expected competences acquired after completion of the module	Students will have a comprehensive of the key features of China's GDP growth, GDP Composition, demographic structure, labor market structure, the evolution of the financial market, and several important economic reforms. Students will also be able to summarize and compare various theories that explain China's economic development.
Further information	-
Expected number of students in class	15
Contact information	Name: Nadine Scherer; Email: nadine.scherer@vwl.uni-mannheim.de

Module number and title	E5088 Big Data in Applied Empirical Research
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Zohal Hessami, Ph.D.
Cycle of offer	Once
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 hours in total; 21 hours class time and 129 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (50%) and referee report (50%)
Goals and contents of the module	This course gives an introduction to the use of big data in applied empirical work in various fields of economics. After defining what big data is, the course gives a classification of and introduction into several machine

	learning algorithms that can be used to analyze big data. Afterwards, this course offers a discussion on what the value-added of this new empirical approach is and to what extent it can be used to test hypotheses and analyze causal relationships. In the second part of the course, students will present one paper from the literature that uses big data to illustrate the concepts discussed in the first part of the course.
Expected competences acquired after completion of the module	Students learn about a new set of methods that rely on machine learning algorithms. The main objective is to understand the rationale behind these algorithms and their relative advantages and disadvantages. Students learn to communicate and discuss published articles from the current literature on big data and machine learning.
Further information	-
Expected number of students in class	30
Contact information	Name: Prof. Zohal Hessami, Ph.D; Email: hessami@uni-mannheim.de

Module number and title	E5090 Internet Economics
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Anton Sobolev, Ph.D.
Cycle of offer	Irregular
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)
Workload	210 hours in total; 31.5 hours class time and 178.5 hours for independent studies and exam preparation
Course language	English
Prerequisites	E601-603 (or equivalent), knowledge in Industrial Organization and Game Theory is advantageous
Grading	Final exam (120 min)
Goals and contents of the module	The last two decades have seen the striking emergence of new Internet platforms for search, e-commerce, online media, job matching, social networking and other online activities. This course is aimed at exploring how online businesses are organized, what role search intermediaries play in getting together buyers and sellers, the optimal design of online platforms

	and related efficiency issues. The topics we are going to cover are based on real world examples, such as consumer search using search engines, competition between online platforms, sponsored search auctions used by Google and online reputation mechanisms on Amazon. The course will be mainly theory-orientated. The theoretical models we will cover thus require a solid microeconomics and math background. However, we will also discuss related case studies, empirical works and experiments.
Expected competences acquired after completion of the module	Students are expected to acquire knowledge of the internet markets and learn how to explain online phenomena by using economics language. They should be able to discuss the key mechanisms on online platforms, platform pricing structure, online participant interactions, consumer surplus and related policy issues.
Further information	There is no required textbook for this course. The lecture will be mainly based on lecture notes and some research papers. However, the following books might be useful for both refreshing basic IO knowledge and selective reading of topics: • Paul Belleflamme and Martin Peitz, Industrial Organization: Markets and Strategies, 2010, Cambridge University Press. • Martin Peitz and Joel Waldfogel, The Oxford Handbook of The Digital Economy, 2012, Oxford University Press. • Hal Varian, Information Rules: A Strategic Guide to the Network Economy, 1998, Harvard Business Review Press. Notice that it is unnecessary to buy those books, as we will only cover a small fraction of each book.
Expected number of students in class	15
Contact information	Name: Anton Sobolev, Ph.D.; Email: anton.sobolev@uni-mannheim.de

Module number and title	E5093 Performance and Productivity Evaluation in R and Stata
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Dr. Dominik Schober
Cycle of offer	Once
ECTS credits	9
Teaching method (hours per week)	Lecture (2) + exercise (2)
Workload	270 working hours; 42 hours class time and 228 hours independent study time and preparation for the exam.

Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final exam (90 min, 70%) + assignments (30%)
Goals and contents of the module	The goal of this course is to learn about the theoretical properties and characteristics of productivity measurement methods and to analyze their strengths and weaknesses. These methods are useful in many fields of applied economic research in all micro-based empirical economics such as industrial, public, environmental economics. The course material covers methods relying on assumptions of exogeneity of outputs, such as Data Envelopment Analysis of Stochastic Frontier Analysis. These are widely used in performance measurement of regulated public sectors, where outputs are assumed to be fixed and direct competition is not possible. Examples are water, electricity, gas or public transport sectors. In addition, these methods are frequently applied in companies for performance benchmarking of units. Complementary to those sectors, there are sectors where investment and capacity choice makes outputs endogenous. A different set of methods is appropriate to study these more dynamic tools. Methods controlling for simultaneity and selection biases will be necessary and studied. Furthermore, allocative effects are central to many economic questions. An additional set of methods studied in this course therefore is devoted to the estimation of price mark-ups. The accompanying exercise is software-based and discusses properties of the above mentioned methods on the basis of detailed data. The course thus provides an introduction to Stata and R in order to analyze basic properties of efficiency and productivity measurement.
Expected competences acquired after completion of the module	Students learn the application of new statistical methods and optimization techniques exceeding the knowledge of a Bachelor's econometric and statistical education. In particular they learn the implementation and (optionally) the extension of existing methods. They learn to understand strength and weaknesses of those methods. Application to real-world cases enables students to understand practical implications in business and economic environments. This helps to quantitatively evaluate firm strategies as well as policy options. This includes knowledge in the application of typical statistical software and specific programs. Acquired knowledge can be directly applied as instruments of decision support as well in companies as for policy consulting. Students can therefore directly profit of the course by learning to assess and evaluate societal, scientific and ethical issues. Given the applied nature of the course, the students will contribute by short seminar paper assignments helping them to actively think about actual specifics and the implementation challenges of respective methods. Students apply the English language throughout the course.
Further information	Literature will be given presenting corresponding topics. There will be an empirical seminar on performance and productivity evaluation corresponding to this lecture/exercise in the subsequent spring

	semester. Students wanting to participate in this seminar are recommended to study the material of this course.
Expected number of students in class	15
Contact information	Name: Dr. Dominik Schober; Email: dominik.schober@zew.de

Elective Modules: Seminars

Module number and title	E574 Internet Economics
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Anton Sobolev, Ph.D.
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (40%), referee report on a seminar paper (60%).
Goals and contents of the module	The rapid development of Internet provides not only new business models and life styles 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	-

Expected number of students in class	10
Contact information	Name: Anton Sobolev, Ph.D.; Email: anton.sobolev@uni-mannheim.de

Module number and title	E585 Topics in Multiple Time Series Analysis
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Dr. Carsten Trenkler
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Seminar paper (75%) and two presentations (25%)
Goals and contents of the module	In this seminar, students work on applied or methodological projects related to multiple time series analysis. Thereby, they can extend and broaden their background acquired during the lectures on multiple time series analysis and empirical macroeconomics. The potential topics refer e.g. to VARMA models, structural VARs, Bayesian VARs and factor models. It is expected that students independently acquire the necessary knowledge regarding the relevant model classes, methods and/or implementations. The maximum number of participants in the seminar is limited to 14. The enrolment takes place between July 30 and August 3. Further details on the enrolment, the seminar and the topics will be posted on the seminar's webpage in due time.
Expected competences acquired after completion of the module	The students have acquired advanced tools for applied and methodological multiple time series analysis, i.e. in a special field of econometrics. They are able to understand, to analyze and to synthesize the corresponding specialist literature and can acquire relevant knowledge independently. The students are able to independently conduct empirical projects in order to address economic questions of interest and can solve advanced theoretical problems with the help of relevant literature. They are able to adequately present their own research results in written and oral form and to critically discuss research results obtained by their fellow students.

Further information	-
Expected number of students in class	10
Contact information	Name: Prof. Dr. Carsten Trenkler; Phone: (0621) 181-1852 ; Email: trenkler@uni-mannheim.de; Office: L7, 3-5, Raum 105

Module number and title	E599 Empirical Environmental Economics
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Elective course for M.Sc. Economics
Cycle of offer	Prof. Ulrich Wagner, PhD / Dimitri Szerman
ECTS credits	Irregular
Teaching method (hours per week)	5
Workload	Block seminar (2)
Course language	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Prerequisites	English
Grading	E601-603 (or equivalent)
Goals and contents of the module	Presentation (40%), report (40%), class room discussion (20%)
Expected competences acquired after completion of the module	This seminar covers recent empirical research in environmental economics. The reading list for the class will focus on a particular research topic in environmental economics, such as climate policy or air pollution control. Each student will present a paper chosen from the list to the class and write a report critiquing the paper. Emphasis will be on identifying the central questions addressed in the paper, evaluating the methodology and data, and making suggestions for improvements and extensions.
Further information	Ability to present academic research to semi-expert audience Ability to critically reflect on academic research, and to articulate criticism and suggestions for improvement.
Expected number of students in class	-
Contact information	15

	Name: Prof. Ulrich Wagner, PhD; Phone: (0621) 181-1420; Email: ulrich.wagner@uni-mannheim.de; Office: L7, 3-5, room 211; Office hours: Thursdays, 2-3pm Name: Dimitri Szerman; Phone: (0621) 181-1957; Email: szerman@uni-mannheim.de; Office: L7, 3-5, room P32

Module number and title	E5002 History of Modern Economics
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Dr. Andrej Svorenčík
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (40%), seminar paper (40%), class room discussion (10%), literature search of primary and secondary sources (10%)
Goals and contents of the module	Economics underwent several major transformations in the 20th century. Mathematical formalization, economic modeling, econometrics and economic experiments transformed it to such a degree that two economists century apart would have trouble to understand each other and practice economics in the same fashion. The aim of this seminar is to understand these transformations through the study of selected Nobel Prize-winning contributions to economics. The Nobel Memorial Prize in Economic Sciences has come to be associated with the most influential and path-breaking research in economics. Since its inception in 1969, over seventy scholars have been awarded it. The seminar consists of four introductory lectures: 1. brief history of economics until the early 20th century; 2. how economics became a mathematical; 3. the econometric revolution; 4. the experimental turn in economics. Thereafter students choose one Nobel laureate for their research paper and presentation.

Expected competences acquired after completion of the module	In this seminar, students learn to comprehend, present, critically evaluate and historically situate the work of leading economists of the second half of the 20th century. As a result, they should gain knowledge of history of modern economics and better understand the practice of modern economics.
Further information	-
Expected number of students in class	10
Contact information	Name: Dr. Andrej Svorenčík; Phone: (0621) 181-3425; Email: svorencik@uni-mannheim.de; Office L7, 3-5, Room 4.06

Module number and title	E5020 Topics in Empirical Microeconomics
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Michelle Sovinsky, Ph.D.
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (50%) and paper (50%)
Goals and contents of the module	This course is intended for masters students interested in conducting research in empirical microeconomics. Students will be required to write a paper on a topic in the field and present it during the class.
Expected competences acquired after completion of the module	Students will be familiar with recent research in empirical IO and will be able to provide constructive criticism of work and gain skills in presenting.
Further information	Paper topics will be selected from current publications in empirical microeconomics.

Expected number of students in class	15
Contact information	Name: Prof. Michelle Sovinsky, Ph.D.; Email: msovinsky@econ.uni-mannheim.de

Module number and title	E5028 Topics on Monetary Union
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Dr. Antoine Camous
Cycle of offer	Once a year
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent); for MMM and Business Mathematics students: good foundations in macroeconomics.
Grading	The final grade will reflect both the content and the clarity of the presentation (30%), the report (40%), and the report refereed (30%).
Goals and contents of the module	To form a Monetary Union, countries renounce to 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. This seminar will review theoretical and empirical frontier research to address the following core questions: 1. Why would countries form a Monetary Union? 2. How to design institutions then? 3. How to measure the costs and benefits of a Monetary Union? The following paper is a starting point for the seminar: Mongelli (2002) – “New Views on the Optimum Currency Area Theory: What is EMU telling us?" - ECB WP 138
Expected competences acquired after	Three interrelated objectives: 1. Review scientific research within its literature, extract its core idea and critically assess the relevance of the idea.

completion of the module	2. Communicate effectively (oral presentation and written reports) 3. Understand and apply the academic peer-review process. Each participant will be matched with a referee. The objective is to encourage collaborative review of both the content and the clarity of individual reports, and so to improve the presentation of academic research (both written and oral).
Further information	-
Expected number of students in class	15
Contact information	Name: Prof. Dr. Antoine Camous; Phone: (0621) 181-0186; Email: camous@uni-mannheim.de; Office: 2.43; Office hours: Wed 4-5pm.

Module number and title	E5061 Firms in the Aggregate Economy
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Dr. Jan Schymik
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 hours working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Term paper (60%) and presentation (40%)
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 acquire the ability to understand and critically evaluate academic articles in the field. They will improve their competencies in scientific writing and further their presentation skills by presenting an academic paper.
Further information	-

Expected number of students in class	15
Contact information	Name: Dr. Jan Schymik; Email: Jan.Schymik@lrz.uni-muenchen.de

Module number and title	E5066 Experimental Public Choice
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Franziska Heinicke
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Term paper (60%) and presentation (40%)
Goals and contents of the module	A large body of research in Behavioral Economics shows that people adhere to social norms, fairness concerns and ethical behavior, even in one-shot interactions. These behaviors have important consequences for the design of political institutions and voting outcomes. This course provides an introduction as to how experimental methods can be applied to study political decision-making. In particular, we will discuss models of strategic voting, preference aggregation and bargaining. Furthermore, we will discuss topics such as voter turnout, the influence of decision rules and the role of responsibility attribution.
Expected competences acquired after completion of the module	The seminar will enable students to read and critically evaluate scientific papers in the field and to consider their contribution in the larger context of the literature. By writing and presenting a term paper students will further improve their skill in writing and presenting scientific work.
Further information	-
Expected number of students in class	15

Contact information	Name: Franziska Heinicke; Email: f.heinicke@uni-mannheim.de; Office: 4.04; Office hours: by appointment

Module number and title	E5072 Topics in Business Cycles
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Dr. Matthias Meier
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 hours working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Term paper (40%), presentation (40%), class room discussion (20%)
Goals and contents of the module	The overarching theme of this block seminar is business cycles. The precise topic, however, changes on an annual basis. Previous topics were Macroeconomics of Uncertainty Fluctuations and Inequality and Policy over the Business Cycle. This year's topic will be Conflict and Business Cycles. Conflicts, such as wars, revolutions, and trade wars, are a defining feature of the business cycle, and cause large swings in economic activity. For example, during the two World Wars many countries adopted war economy plans, which raised taxes, drafted soldiers, directed productive capacity toward military equipment, and restricted the supply of leisure goods. Similarly, the Korean War and Vietnam War raised military production and drafted men away from the labor market. The Iranian Revolution and the Gulf War had large effects on Western economy through the supply of oil. A more recent example is the US-China trade war. As of now (March 2019), it is an open question whether this will lead to a recession. This course reviews a wide range of literature on conflict and business cycles. The reading list covers historical accounts of specific conflicts, as well as modern empirical evidence on the macroeconomic impact of conflicts. Each student will present a paper chosen from the list to the class and write a report critiquing the paper. Emphasis will be on identifying the central questions addressed in the paper, evaluating the methodology and data, and making suggestions for improvements and extensions.

Expected competences acquired after completion of the module	Students learn to read and understand current research in the area. In contrast to pure lecture-type classes students are highly active in developing the material. Students need to draw on material from previous courses in micro, macro and econometrics to sort the wealth of information and research. The writing of a term paper allows students to improve their economic writing skills, and to express complex economic phenomena in their own words. Students present their work in front of the entire course audience. This trains their presentation skills. In addition students need to critically review the material and suggest own ideas for future research. As a result of discussion by all seminar participants students learn to interact with each other and evaluate other students' work.
Further information	-
Expected number of students in class	10
Contact information	Name: Prof. Dr. Matthias Meier; Email: m.meier@uni-mannheim.de

Module number and title	E5089 Positional Externality: Utility from a Relative Position
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Duk Gyoo Kim, Ph.D.
Cycle of offer	Fall 2019
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)
Grading	Term paper (50%), presentation (40%), class room discussion (10%)
Goals and contents of the module	The seminar will cover selected topics on positional concern. A positional good is one whose utility depends strongly on how it compares with others in the same category. A consumption is positional if it features a certain form of direct/indirect competition. Military arms races, R&D competitions, investments as a signal of status, and conspicuous consumptions can be analyzed in the unified framework. Since one's decision negatively affects the others' utility, positional concern is always associated with negative

	externality, which yields socially sub-optimal resource allocations. Thus, we can utilize theoretical and empirical studies on public finance dealing with negative externality and market failure to this context. Our goal is to keep up with both theoretical and empirical studies on positional concern. Students are required to present one paper in the provided list to discuss the paper's main contributions, reasoning, and potential improvements. Students are also required to write a report in the form of a research proposal or a survey paper.
Expected competences acquired after completion of the module	Students will learn to read and understand core ideas of positional externalities, and be able to apply their knowledge and understanding in new and unfamiliar situations connected to their study field in a broad and multidisciplinary way. Students will also learn various methodologies used in the current research of this area, including theoretical analysis and laboratory experiments. While writing a term paper and presenting their work, students will improve their economic writing and presentation skills, develop a way to express complex economic phenomena using their own words, and have chances to critically review the current studies and suggest their own ideas for future research.
Further information	-
Expected number of students in class	10
Contact information	Name: Prof. Duk Gyoo Kim; Phone: (0621) 181-1797; Email: d.kim@uni-mannheim.de; Office: L7, 3-5, room 2.25; Office hours: by appointment

Module number and title	E5092 Topics in Economics of Public Procurement
Form and usability of the module	Elective course for M.Sc. Economics
Responsible teacher of the module	Prof. Achim Wambach, Ph.D. / Leonardo Maria Giuffrida, Ph.D.
Cycle of offer	Fall 2019
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Course language	English
Prerequisites	E601-603 (or equivalent)

Grading	Presentation (50%) and report (50%)
Goals and contents of the module	The seminar covers topics that reflect current developments in the academic and policy-oriented literature in economics of public procurement. Students present and discuss (mostly empirical) papers on (i) the effectiveness of government demand as a tool used for further public policies in a wide range of fields; (ii) remedies to asymmetric information between buyer and seller in public tenders; (iii) topics such as favoritism, collusion, corruption and bureaucracy in the context of public procurement.
Expected competences acquired after completion of the module	Students have gained knowledge in recent developments in the economic literature on public procurement. They can apply their expertise and methods to analyze and evaluate ongoing debates in both the academic and the policy-oriented literature. The students have broadened their analytical and empirical abilities as well as their presentation and discussion skills.
Further information	Seminar participants have to write a seminar paper (22,000 characters including spaces), in which they analyze a problem related to competition economics in the context of one of the topics listed above. The paper has to be presented in class (20 minutes presentation + 10 minutes discussion). The seminar paper and the presentation contribute equally to the final grade
Expected number of students in class	15
Contact information	Name: Leonardo Maria Giuffrida, Ph.D.; Email: leonardo.giuffrida@zew.de

Additional Courses for Economists

Module number and title	E5051 Mannheim Competition Policy Forum
Form and usability of the module	Compulsory course for Master in Economics with specialization Competition and Regulation Economics, elective course for Master in Economics with specialization Economics
Cycle of offer	Each semester
Course language	English
Goals and contents of the module	The last couple of years have seen a remarkable increase in the application of economic insights to competition problems. In order to further promote and refine this development, practitioners need to understand how microeconomics can help to shed light on particular aspects of competition problems. At the same time, academics benefit from a better understanding of real-world challenges and institutional details. The forum aims at providing a platform for the discussion of recent cases, general competition policy issues, and relevant academic research in the

field. Renowned practitioners and academics will be invited to present their views on cases and general policy questions, followed by a discussion of the economic implications with the audience.