Fall Semester 2015

If you want to join an elective course please send your **registration by e-mail** to econgrad<at>uni-mannheim.de **no later than September 1st.**

Information for exchange students, MMM students and Business Mathematics students:

Please note that you can choose freely from our elective courses as long as you fulfill the prerequisites mentioned there. (In case of doubt, please contact the lecturers for more information about the prerequisites and to discuss if you fulfill them.) **Core courses** are **not open** for exchange students and students from other programs.

E600 Mathematics

Who?

Justin Leduc, L9-7, Room 411 Justin.leduc@gess.uni-mannheim.de

Office hours: I will be available and ready to answer your questions during the whole fall term. Just send me an e-mail, we can arrange a meeting if necessary.

When?

This is a block course and it will take place from the 31st of August 2015 until the 4th of September 2015. Two groups will be constituted and you will be informed, via e-mail and in due time, to which group you belong.

<u>Group 1:</u> Every morning, Monday and Friday included, from 8:30 a.m. until 1:30 p.m. <u>Group 1:</u> Every afternoon, Monday and Friday included, from 14:00 p.m. until 19:00 p.m.

Where?

Both the morning and the afternoon sessions will take place in L 15, 1-6 A 001. Getting used to Mannheim's street addresses system may take a while for new comers. So here is the map: http://www.uni-

mannheim.de/ionas/uni/1/service/anfahrt_lageplan/lageplan/Internet%20CP%205_02_13.pdf L15 is right next to the train station ("Mannheim Hauptbahnhof", Page 2, bottom right corner)

What?

This course is a preparatory math course. I will thus try to make sure that you do not start the Master program without mastering what can be considered as the most basic mathematical concepts for an economics graduate student. The course will be application oriented rather than proof oriented. The plan is as follows:

- Introduction to Matrix Algebra (4.5 hours)
- Introduction to Vector Spaces (6 hours)
- Miltivariate Calculus (6 hours)
- Convex Optimization (6 hours)

Any Prerequisite?

Almost none. **I will assume that you are well acquainted with basic logic though**. To make sure you indeed are, you should check this webpage:

http://gowers.wordpress.com/category/cambridge-teaching/basic-logic/

These are blog posts, the earliest ones are to be found at the bottom of the page. Even if you

feel confident in basic logic, I advise them to you, they are worth a reading!

The next two requirements are really high-school level, I only propose them so as to make things clear and provide you with short reminders in case you feel like you need them. I will assume a very basic knowledge in naïve set theory, such as that which is exposed in section 1.1 and section 1.2 (pages 1-3) of this online document:

http://www.math.duke.edu/~wka/math187/set.pdf

Finally, I will assume that you know basics of single-variable calculus, such the notions exposed in sections 1-3.6 (pages 1-13) of this online document:

http://www2.econ.iastate.edu/classes/econ500/hallam/documents/Calc Sim 000.pdf

Any Readings?

Lecture notes will be uploaded in due time on my personal webpage: http://leducjustin.wordpress.com/teaching/e600-mathematics-university-of-mannheim-fall-2014/

I will not follow a unique source for these courses. Therefore no extra-reading is mandatory. Yet, if you have access to a copy of *Advanced Microeconomic Theory* (3rd Edition) by Geoffrey A. JEHLE and Philip J. RENY, its mathematical appendix covers the last three bullet points of this course and you may want to read it.

Core Courses

E601 Advanced Microeconomics

Fiocco/Tarantino

The course gives a foundation for studies of microeconomics on a graduate level. It covers classical consumer demand under certainty, utility maximization and cost minimization, choice under uncertainty, fundamentals of game theory, games under incomplete information, and different equilibrium refinement concepts. In the second part, the course addresses standard principal-agent problems under asymmetric information (adverse selection and moral hazard). General equilibrium models are also investigated.

Prerequisites: Mathematics precourse highly recommended

ECTS credits: 10.0

Start: 08.09.2015 End: 11.12.2015

Lecture:

Tuesday, 08:30 to 10:00 in L 7, 3-5 S 031 Thursday, 08:30 to 10:00 in L 7, 3-5 S 031

Exercises:

Group 1 (Balzer) Wednesday, 08:30 in L 9, 1-2 003

Group 2 (Balzer) Friday, 10:15 in L 9, 1-2 003 **Examination:** Written exam: 120 min (60% of grade); Midterm exam: 90 min (30% of grade); Exercises (10% of grade)

Recommended textbooks:

Laffont, J.-J., Martimort, D. (2002). The theory of incentives: the principal-agent model. Princeton University Press, Princeton and Oxford.

Mas-Colell, A., Whinston, M. D. Green, J. (1995). Microeconomic Theory. Oxford University Press. Varian H. R. (1992). Microeconomic Analysis (third edition). Norton & Company. New York and London.

Additional reference:

Varian H. R. (1992). Microeconomic Analysis (third edition). Norton & Company. New York and London.

Contact person: Raffaele Fiocco; raffaele.fiocco@uni-mannheim.de; tel: +49 621181 1873; room 3.09; office hour: upon appointment

E602 Advanced Macroeconomics

Pfeifer

Goals and Contents of the module: The course familiarizes students with the essential concepts of modern macroeconomic theory at an advanced level. A particular focus will be placed on learning how to use formal microfounded models to analyze and understand both economic growth dynamics and business cycle fluctuations.

In order to guide the economic modeling, the course will use empirical data to generate stylized facts about economic growth and business cycles that useful models must aim to explain, both quantitatively and qualitatively.

In terms of economic models, the following topics will be covered:

- Growth Theory: the Solow Model, the Ramsey-Cass-Koopmans Model, and Endogenous Growth Theory.
- Business Cycles: the Real Business Cycle Model, the Classical Monetary Model, and the basic New Keynesian Model.

During the course students will also learn the necessary techniques to solve dynamic stochastic models both analytically and numerically using Dynare. While the course will be mostly concerned with positive economic theory, students will also learn to derive and understand the normative and policy implications of the covered models.

Expected Competences acquired after completion of the module: 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 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.

Prerequisites: Good working knowledge of calculus (constrained optimization, multivariate Taylor expansion, geometric series)

ECTS credits: 10.0

Start: 08.09.2015

Lecture

Tuesday, 12:00 to 13:30 in L7, 3-5, 001 Wednesday, 12:00 to 13:30 in L7, 3-5, 001

Exercises:

Group 1 (Krrikyan) Tuesday, 17:15 to 18:45 in L 9, 1-2 002 Group 2 (Krrikyan) Wednesday, 17:15 to 18:45 in L 9, 1-2 002

Examination: Written midterm exam (60min, 50%), final exam (60min, 50%), plus assignments (up to 10% bonus)

Additional Information The mandatory textbook chapters and articles will be announced in the lecture.

The following books are good references for the topics covered:

Acemoglu, Daron (2008), Introduction to Modern Economic Growth, Princeton University Press

Sala-I Martin, Xavier/Barro, Robert (2003): Economic Growth, MIT Press, 2nd edition McCandless, George (2008), The ABCs of RBCs - An Introduction to Dynamic Macroeconomic Models, Harvard University Press

Romer, David (2011): Advanced Macroeconomics, McGraw-Hill, 4th edition

King, R. Rebelo, S. (1999): Resuscitating Real Business Cycles, in: Taylor/Woodford (Hrsg.): Handbook of Macroeconomics, Vol. 1, pp. 927-1007.

Gali, Jordi (1999): Technology, Employment, and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations?, American Economic Review 89(1), pp. 249-271 Gali, Jordi (2008): "Monetary Policy, Inflation, and the Business Cycle", Princeton University Press

Walsh, Carl. E. (2010): Monetary Theory and Policy, MIT Press, 3rd edition

E603 Advanced Econometrics

Frölich

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 an
- 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.

ECTS credits: 10.0

Start: 10.09.2015 End: 11.12.2015

Lecture

Thursday, 12:00 to 13:30 in L 7, 3-5, 001 Friday, 12:00 to 13:30 in L 7,3-5, 001

Exercises:

Group 1 (Bouguen) Thursday, 17:15 to 18:45 in L 9, 1-2 003

Group 2 (Bouguen) Friday, 13:45 to 15:15 in L 9, 1-2 003

Examination: Written exam 120 min

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.

Elective Courses

E5000 Research Design Course: New research on old data (block seminar)

Streb

Goals and Contents of the module: The online-database HISTAT encloses more than 300,000 historical time series which have been hardly used for economic research. These time series cover many fields such as labour, demographics, health, elections, income etc. Each student will choose one field, evaluate the historical data and develop a concept about how to use these data in economic research.

Expected Competences acquired after completion of the module:

Ability to assess the strengths and weaknesses of established research in economic history

Ability to assess the quality of historical data

Ability to design own research project

Ability to write and present a seminar paper

Prerequisites: E602-603, E702-703, E802-803, E805-806 (or equivalent)

ECTS credits: 5.0

Organizational Meeting: Monday 07.09.2015, 17:15 to 18:45 in L9, 1, 002 Block seminar: Thursday 19.11.2015, 09:00 to 18:00 in L 7, 3-5, room P19/20

Requirements for the assignment of ECTS-Credits and Grades: Seminar paper (weighting 2/3); Presentation (weighting 1/3)

Contact:Prof. Dr. J. Streb, Tel. 06221 181-1932, E-Mail: streb@uni-mannheim.de, Office: L7, 3-5, room P 19/20

E5001 High-Dimensional Covariance Estimation (seminar)

Jentsch

Goals and Contents of the module: Covariance and correlation matrices play fundamental roles in every aspect of the analysis of multivariate data collected from a variety of fields including business and economics, health care, engineering and environmental and physical sciences. In the first half of the semester, a general overview of high-dimensional covariance matrix estimation is given in form of a lecture and seminar topics will be distributed. The students will work on topics that focus on several concepts/strategies proposed in the literature to tackle high-dimensionality with respect to large covariance matrix estimation. The seminar is suitable as a basis for a master thesis in theoretical statistics for students from economics and from business mathematics. The maximum number of participants is limited to 14.

Expected Competences acquired after completion of the module: The students acquired a general overview of problems caused by high-dimensionality of data.

They learned about several concepts/strategies to tackle high-dimensionality that allow the estimation of large covariance and correlation matrices. They become familiar with proof techniques applied frequently in this field of research.

They are capable to understand the corresponding literature for a specific seminar topic and to identify independently relevant references.

Furthermore, they are capable to extract the relevant information from the literature, to

summarize it in written form, to give an oral presentation about it and to defend it in a discussion.

Prerequisites: E601-603 (or equivalent)

ECTS credits: 6.0

Start: 09.09.2015 End: 02.12.2015

Wednesday, 15:30 to 17:15 in L 9, 1-2 room 003

Requirements for the assignment of ECTS-Credits and Grades: Handout, Presentation, Discussion

contact: Carsten Jentsch; e-Mail: cjentsch<at>mail.uni-mannheim.de, L7, 3-5, Raum 129, Tel. 181-1938

E5002 History of Modern Economics (block seminar)

Svorenčik

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.

Prerequisites: E601-603, E700, E701, E702, E703 or equivalent; for MMM and Business Mathematics students: good foundations in economic theory

ECTS credits: 5.0

Organizational Meeting: Thursday 10.09.2015, 15:30 to 17:00 in L 9, 1-2 room 003 Block seminar: Friday 06.11.2015, 10:00 to 17:00 in B6, 23-25 building A; 1. floor, room A 103

Saturday 07.11.2015, 10:00 to 17:00 in L9, 1-2 Seminar room 002

Requirements for the assignment of ECTS-Credits and Grades: Presentation, seminar paper and class participation (Q&A, constructive criticism of other presentations)

Contact: Dr. Andrej Svorencik, Tel. 0621 - 181 - 3425, eMail: svorencik@uni-mannheim.de, office L7, 3-5, R 4.06

E5003 Imperfect Competition and Firm Strategy (block seminar)

Samkharadze

This seminar covers selected topics in competitive strategy broadly defined. We will particularly focus on the study of strategic interaction between firms and consumers in imperfectly competitive markets. We will cover topics such as pricing strategies by firms, strategies for network and information goods, brand strategies, product design, advertising, information suppression, strategic responses by consumers, consumer behavioral biases, etc. To explore these topics, we will use simple but rigorous analytical models and plenty of realworld examples. Main analytical tools will be microeconomic theory and game theory.

Prerequisites: To learn effectively from this course, students should have taken bachelor level microeconomics, game theory or introductory industrial organization. (Microeconomic A+B, Industrial Organization).

ECTS credits: 5.0

Organizational Meeting: Friday 25.09.2015, 10:15 to 11:45 in L9, 1-2 Seminar room 002 Block seminar: Friday 20.11.2015, 10 am to 6 pm, in L9, 1-2 Seminar room 002

Saturday 21.11.2015, 9 am to 6 pm, in L9, 1-2 Seminar room 009

Examination: take home exam

Contact: For questions concerning the course – Lily Samkharadze, email: likasamkharadze@gmail.com Office hours: by appointment.

E5007 Multivariate Analysis and Programming in STATA (lecture)

Avdeenko/ Steinke

Goals and Contents of the module The majority of data sets collected by researchers in all disciplines are multivariate. The correct application of statistical methods allows extracting as much information as possible from the data at hand. Therefore, main objective of is to give

students a practical introduction to multivariate analysis and econometrics. The lecture will include methods both for describing and exploring data and for making formal inferences about them. Additionally, this course will also offers an introduction to advanced programming in Stata. The lecture will start with an introduction to efficiently written do-files (including data processing). Different data types will then be presented, i.e. the German Socio-Economic Panel (SOEP). 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 analyse 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. Moreover, we will apply the programming techniques to implement selected cross-section models.

Expected Competences acquired after completion of the module Students will learn to program quantitative methods in Stata. They know Stata and Mata as programming languages and understand the standard syntax / grammar of these languages. Thus, the students will have developed a better understanding of the implemented commands and will be able to adjust them. They can apply their knowledge to different data records, can identify and take advantage of different data structures. They can work with cross-sectional and longitudinal data-sets. Furthermore, they are able to automate time-consuming analyses and thus to operate more efficiently.

In addition, they are able to perform Monte Carlo simulations and to interpret and evaluate the characteristics of the methods and their benefits in certain situations. They can take samples from any random distributions, describe their properties and understand the implications on estimation methods. They have acquired an intuitive understanding of the estimates and their uncertainty and understand the implications in finite samples. Using Monte Carlo simulations, students are also able to interpret significance tests correctly and recognize the limits of their usefulness.

Prerequisites: E601-603 (or equivalent)

ECTS credits: 5.0

Monday (every other week), 15:30 to 18:30 in L7, 3-5, PC-POOL 158

recommended textbook: Cameron/Trivedi (2009). Mircoeconometrics using Stata. Stata Press.

Requirements for the assignment of ECTS-Credits and Grades: written exam.

Please note:

lecture starts on September 14th!

E5008 Economic and Financial Market Policy (lecture)

Grüner

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

Prerequisites: E601-E603 (or equivalent)

ECTS credits: 5.0

Start: 10.09.2015 **End**: 10.12.2015 Thursday, 15:30 to 17:15 in L 9, 1-2, 003

Requirements for the assignment of ECTS-Credits and Grades:

- First draft of slides for case presentation ten days before the presentation: 10%.
- Case presentation: 30%.
- Final exam (60 Minutes): 60%.

contact:Prof. Dr. Grüner, Tel. (06221) 181-1886, E-Mail: gruener@uni-mannheim.de, Office: L7, 3-5, room 2-06

Please note:

additional meeting on Thursday, September 10th from 15:30 until 18:00 in room L9, 1, 003

E5009 Topics in Macroeconomics with Household Heterogeneity (seminar)

Yum

Goals and Contents of the module: This course provides an introduction to quantitative macroeconomics with household heterogeneity. These richer macroeconomic models have been used to answer various interesting questions related to inequality, which is hard to study with a traditional representative framework. We will cover simple models with analytically tractable heterogeneity as well as richer models which require numerical methods, and study how these models are applied to study various questions.

Expected Competences acquired after completion of the module: Students will become familiar with topics, issues, and tools in the literature.

Prerequisites: E601-603 (or equivalent)

ECTS credits: 5.0

Start: 10.09.2015 End: 10.12.2015 Thursday, 13:45 to 15:15 in L9, 1-2, 003

Requirements for the assignment of ECTS-Credits and Grades: Report, Presentation, Class participation (Q&A, constructive criticism of other presentations)

contact: Prof. Minchul Yum

Further information:

Krusell and Smith (2006) "Quantitative Macroeconomic Models with Heterogeneous Agents" Econometric Society Monographs

Heathcote, Storesletten, and Violante (2009) "Quantitative Macroeconomics with Heterogeneous Households" Annual Review of Economics

Guvenen (2011) "Macroeconomics with Heterogeneity: A Practical Guide" Economic Quarterly

E518 Information and Incentives (lecture + exercise)

Levy

Course description: This course focuses on the principal-agent model, i.e. the strategic interaction between two players (the principal and the agent), one of which (the agent) has superior information. We will examine how the principal optimally designs a contract that induces the agent to reveal his private information (adverse selection model) or to provide effort (moral hazard model). We will then explore extensions, in particular in the field of labour economics (multi-tasking, multi-agent moral hazard...), as well as dynamic extensions. We will also discusses other applications, in corporate finance, industrial organization etc.

Expected competences: Basic knowledge of information economics models. After completion, the students should be able to analyze a situation involving an agency problem with the lens of the theory. For instance, they should be able to recognize an agency dimension in a newspaper article dealing with bonuses in the financial industry. Overall, they should be aware of the pervasiveness of asymmetric information and be able to grasp intuition of its impact in various environments, in particular within the firm.

Prerequisites: none

ECTS credits: 6.0

Start: 16.09.2015 End: 09.12.2015

Requirements for the assignment of ECTS-Credits and Grades: Final exam (2 hours)

Contact: Raphaël Levy, Office 3.02, tel: 0621-181-1913, raphael.levy@uni-mannheim.de Office hours: upon appointment

Lecture:

Wednesday, 08:30 to 10:00 in L7, 3-5, P043

Excercise:

Wednesday, 10:00 to 10:45 in L7, 3-5 P043

Attention: changed times!

Wednesday, October 28th from 8:30 until 11:45 am in room L7, 3-5 P043 Wednesday, November 4th from 8:30 until 11:45 am in room L7, 3-5 P043

Please note: the first session has to be postponed and takes place at September 16!

E520 Empirical Industrial Organization (block seminar)

Durrmeyer

Course Description: This block seminar covers recent empirical work in Industrial Organization. Students will present one paper and write a report evaluating the paper critically and suggesting improvements as well as further applications.

Expected Competences acquired after completion of the module: Students develop skills in reading and analyzing very recent research papers. They are asked to summarize a research article and communicate their understanding through an oral presentation. They are also asked to have a critical analysis of the article and communicate their analysis through a short written report. Students develop skills in in reading academic papers in structural empirical industrial organization.

Prerequisites: Advanced Microeconomics, Advanced Econometrics

ECTS credits: 5.0

Organizational Meeting: Wednesday, 16.09.2015, 12:00 to 13:00 in L 7, 3-5 room 410

Confirmed meeting: 09.12.2015, 14:00 to 19:00 in L 9, 1-2, lecture hall 001

Requirements for the assignment of ECTS-Credits and Grades: Presentation (1/2) + report (1/2)

Contact: Isis Durrmeyer, Tel.: 0621 181-1840, idurrmey@staff-uni.mannheim.de Office: 3-26 Office hours: upon appointment

E521 Methods in Empirical Industrial Organization (lecture + exercise)

Durrmeyer/Nocke

This course introduces students to empirical methods in Industrial Organization. The course will put a substantial amount of effort in having the students work with econometric software in analyzing actual data sets, reproducing and criticising results in previous work and learning the actual practice of econometrics as undertaken by the best applied economists. There will be "problem sets" based on the readings. They are likely to be computer and data intensive. Students should make sure you have access to the relevant computer programs, such as Stata.

Prerequisites: E601 or E701 Advanced Microeconomics and E603 or E703 Advanced Econometrics for Masters Students

ECTS credits: 9.0

Start: 08.09.2015 End: 08.12.2015

Lecture:

Tuesday, September 8th to September 15th and every other week starts on September 29th

from 08:30 to 11:45 in L9, 1, 003

Excercise:

Tuesday, every other week starts on September 22nd from 08:30 to 11:45 in L9, 1, 003

Requirements for the assignment of ECTS-Credits and Grades: Students will work during the semester on a personal project that involves the definition of the research question, the gathering of data and the analysis of the data using models and technique from the lecture. At the end of the semester, students present their project.

Textbook: Quantitative Techniques for competition and antitrust analysis, Davis and Garcés

Contact: Isis Durrmeyer, Tel.: 0621 181 1840, idurrmey@staff-uni.mannheim.de, Office: 3-26 Office hours: upon appointment

E526 Development Economics (lecture)

Kaufmann

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.

- 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. Risk and Insurance

Prerequisites: E601-603 (or equivalent) for all Master's elective courses

Econometrics at the Master level

ECTS credits: 5.0

Start: 16.09.2015 End: 09.12.2015

Wednesday, 13:45 to 15:15 in L 7, 3-5, P044

ATTENTION: The first session on September 9th has to be postponed to September 16th!

The session on November 18th is cancelled. Replacement date:

Tuesday, 13.10.2015, 13:45 - 15:15, L9, 1-2 lecture hall 001

Requirements for the assignment of ECTS-Credits and Grades: Final exam

recommended Textbook:

Ray, D. (1998), Development Economics, Princeton University Press, ch. 12, 13, 15. (from now on abbreviated RAY)

List of papers discussed in class

- 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.
- Schultz, P. (2004), "School subsidies for the poor: evaluating the Mexican Progresa poverty program", Journal of Development Economics, 74(1), 199-250. Health and Nutrition
- 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.
- Miguel, E. and Kremer, M. (2004) "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities, Econometrica, 72(1), 159-217.
- Duflo, E. (2003), "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation", World Bank Economic Review, 17, 1-25.
- Attanasio, O. and Kaufmann, K. (2014) "Education Choices and Returns to Schooling: Mothers' and Youths' Subjective Expectations and their Role by Gender", forthcoming Quantitative Economics
- Townsend, R. (1994), "Risk and insurance in village India", Econometrica, 62, 539-91.

E553 Development Economics (block seminar)

Kemper/Landmann

Development economics deals with economic aspects of the development process in low-income countries. After an examination of the long-run factors of economic development, this lecture focuses on interventions intended to promote economic growth and welfare of the population in developing countries, for example, through interventions in microfinance (credit, savings and insurance), health and education.

In particular, it accumulates evidence to answer the following questions: Do these interventions really improve the living conditions of the poor? Which interventions do work? And which do not?

Methodologically, this lecture comprises of econometric methods used for program evaluation. These methods identify causal relationships between interventions and their intended outcomes (e.g. using randomized control trials, instrumental variables, regression discontinuity). The practical exercises include hands-on empirical work with STATA. In terms of learning outcomes for students, the lecture pursues the following goals:

Introduce students to state-of-the-art research in Development Economics. Enable students to do own empirical research work employing the econometric methods dealt with in this course.

Enable students to make critical assessments of research work.

General readings: Particularly relevant readings are marked with a "*". The following textbooks and book chapters will be covered in parts.

- Angrist, J. and J.-S. Pischke (2009) Mostly Harmless Econometrics: An Empiricist's Companion, Princeton and Oxford: Princeton University Press. [AP]
- Armendariz, B. and J. Morduch (2007) The Economics of Microfinance, Cambridge (MA) and London: MIT Press. [AM]
- Deaton, A. (1997) The Analysis of Household Surveys: A Microeconometric Approach to Development Policy, Baltimore: John Hopkins University Press. [D]
- Duflo, E., Glennerster, R. and M. Kremer (2008) "Using Randomization in Development Economics Research: A Toolkit," in P. Schultz and J. Strauss (Eds.) Handbook of Development Economics, Vol. 4, Amsterdam: North-Holland. [DGK]

Please have a look on the detailed syllabus.

Prerequisites: E700, E701, E702, E703 or equivalent; for MMM students: CC502 Applied Econometrics; for students from other programs: good foundations in econometrics

ECTS credits: 7.0

Introductory Session: Friday, 11.09.2015, 10:15 to 11:45 in L 7, 3-5, P 044 Information about the course schedule: The lecture will be split into 5 blocs à 4 sessions (lectures and practical exercises) respectively taking place in calendar weeks 7, 9, 12, 16 and 20 (most likely on Fridays). The introductory lecture will take place on September 11th, 10:15 AM.

Oct 02, 2015 - 8:30 AM - 4:45 PM - O133 KPMG lecture hall, Castle East Wing Oct 23, 2015 - 8:30 AM - 4:45 PM - S 031 Seminar room, L 7, 3-5

Oct 30, 2015 - 8:30 AM - 4:45 PM - 308 Seminar room, L 9, 7 Nov 13, 2015 - 8:30 AM - 4:45 PM - 004 lecture hall, L 9, 1-2 Nov 27, 2015 - 8:30 AM - 4:45 PM - 001 lecture hall, L 9, 1-2

Examination/grading: There will be problem sets and a written exam (90 minutes). They will count towards the final grade as follows: written exam: 70 percent, problem sets: 30 percent

Contact: Dr. Niels Kemper, Tel. 181-1805, E-mail: niels.kemper(at)uni-mannheim.de, L7, 3 - 5, Raum 101

Andreas Landmann, Tel. 181-1842, E-mail: andreas.landmann(at)uni-mannheim.de, L7, 3 - 5, Raum 103

Office hours: By appointment (please contact us by email).

E566 Strategic Information Transmission for Masterstudents (block seminar)

Honryo

Course description: Students are required to pick one paper in selected topics and give a presentation to discuss the paper's strengths and weaknesses. Based on comments that they receive in the presentation, students are required to write a report summarizing the seminar paper. Topics include cheap talk games, persuasion games, and their application to economics, political economics, and finance. To make a presentation in class based on a paper of your choice on strategic information transmission, I recommend that you pick a paper from the list I will distribute. Students are required to pick one paper in selected topics and give a presentation to discuss the paper's strengths and weaknesses. Based on comments that they receive in the presentation, students are required to write a report summarizing the seminar paper. Expected Competences acquired after completion of the module On top of improving presentation skills, after the seminar, students are supposed to acquire ability to critically review academic papers, and make constructive comments, and clearly write those down. Also, students will obtain a basic idea of what is going on in the research field of "strategic information transmission."

Prerequisites: Knowledge of non-cooperative game theory under incomplete information.

ECTS credits: 5.0

Organizational Meeting: Wednesday, 09.09.15, 13:45 to 15:15 in L7,3-5 S 031

Requirements for the assignment of ECTS-Credits and Grades: One seminar presentation and one report on the paper that you chose. Presentation counts for 50% of the final grade and the report counts for another 50%.

Contact: Takakazu Honryo, Tel. 181-3062, E-mail: thonryo@mail.uni-mannheim.de, L7, 3-5, room 3.43

E583 Empirical Public Finance and Economic Policy (lecture + exercise)

Peichl/Siegloch

Goals and Contents of the module: The course covers empirical methods needed for research in Public Economics and Economic Policy. Based on fundamental theoretical models and their predictions on optimal policies, current empirical evidence on the effects of economic policies is discussed. In practical sessions, students will replicate influential empirical results and thereby get to know state-of-the-art methods of policy evaluation. Topics to be covered include efficiency costs and incidence of taxation, income and capital taxation, behavioral responses to taxes and transfers as well as central labor market policies.

Expected Competences acquired after completion of the module: Understanding of modern (econometric) methods used in Public Finance and Economic Policy and the ability to implement them. Understanding and knowledge of the research frontier in the field. Understanding of how economic theory and empirical research strategies can be combined to address questions of optimal policy design.

Prerequisites: E601-603 (or equivalent)

ECTS credits: 7.0

Start: 10.09.2015 End: 10.12.2015

Lecture:

Thursday, 10:15 to 11:45 in L7, 3-5, P043

Excercise:

Tuesday, every other week starts on September 15th from 15:30 to 17:00 in L7, 3-5, PC-

Pool 158

Requirements for the assignment of ECTS-Credits and Grades:

contact:Prof. Dr. Andreas Peichl (peichl@zew.de)

Prof. Dr. Sebastian Siegloch (siegloch@uni-mannheim.de

Further information: Readings based on papers and lecture notes.

E584 Topics in Public Economics (block seminar)

Dörrenberg/Dolls /Fuest

The seminar examines and discusses recent research papers in the field of empirical public economics. The course aims to familiarize students with recent, state-of-the-art research topics in public economics and provides an overview of the empirical toolkit that is employed in this literature. The selected papers deal with questions on the behavioral effects of taxes (income taxes, corporate taxes, payroll taxes, property taxes, etc.), the incidence of taxation, the implications of non-rational behavior for taxation, income/wealth inequality, the European fiscal system, and tax compliance. The empirical methods we cover include quasi-experiments using field data (e.g., difference-in-differences, bunching methods, regression discontinuity), fixed effects regressions, field experiments, online experiments, laboratory experiments, simulation techniques, and others.

Prerequisites: E601-603 (or equivalent) for all Master's elective courses For students from other programs: previous attendance of econometrics classes required, public economic classes desirable E700-E703, E801-E806 for all PhD courses

ECTS credits: 5.0

Organizational Meeting: Wednesday 09.09.2015 (ZEW), 16:00 to 17:00 in ZEW, room 1

Block seminar: t.b.a. in rooms tba

Research papers:

 Alesina, Alberto, Omar Barbiero, Carlo Favero, Francesco Giavazzi, Matteo Paradisi, 2015, Austerity in 2009-2013, NBER Working Paper No. 20827

- Best, Michael Carlos and Henrik Kleven, 2014, Housing market responses to transaction taxes: evidence from notches and stimulus in the UK, LSE Working Paper
- Blumkin, Tomer, Bradley Ruffle, and Yosef Ganun, 2012, Are income and consumption taxes ever really equivalent? Evidence from a real-effort experiment with real goods, European Economic Review 56(6): 1200-1219
- Chetty, Raj, Adam Looney, and Kory Kroft, 2009, Salience and taxation: theory and evidence, American Economic Review 99(4): 1145-1177
- Chetty, Raj, John Friedman, and Emmanuel Saez, 2014, Using differences in knowledge across neighborhoods to uncover the impacts of the EITC on earnings, American Economic Review
- Dwenger, Nadja, Henrik Kleven, Imran Rasul, and Johannes Rincke, 2014, Extrinsic and intrinsic motivations for tax compliance: Evidence from a field experiment in Germany. Working Paper, MPI Munich
- Engström, Per, Katarina Nordblom, Henry Ohlsson, and Annika Persson, forthcoming, Loss evasion and tax aversion, American Economic Journal: Economic Policy
- Fuest, Clemens, Andreas Peichl, and Sebastian Siegloch, 2013, Do higher corporate taxes reduce wages? Micro evidence from Germany, ZEW Discussion Paper
- Immervoll, Herwig, Henrik Kleven, Claus Kreiner, and Emmauel Saez, 2007, Welfare reform in European countries: A microsimulation analysis, Economic Journal 117(1): 1-44
- Kleven, Henrik Jacobsen, Martin b. Knudsen, Claus Thustrup Kreiner, Soren Pedersen, and Emmauel Saez, 2011, Unwilling or unable to cheat? Evidence from a tax audit experiment in Denmark, Econometrica 79(3): 651-692
- Kleven, Henrik, Camille Landais, Emmanuel Saez, and Esben Schultz, 2014, Migration and wage effects of taxing top earners: evidence from the foreigners' tax scheme in Denmark, Quarterly Journal of Economics
- Kuziemko, Ilyana, Michael I. Norton, Emmanuel Saez, and Stefanie Stantcheva, forthcoming, How elastic are preferences for redistribution? Evidence from randomized survey experiments, American Economic Review
- Piketty, Thomas and Gabriel Zucman, 2014, Capital is back: wealth-income ratios in rich countries 1700-2010, Quarterly Journal of Economics 129(3): 1155-1210
- Saez, Emmanuel, 2010, Do taxpayers bunch at kink points?, American Economic Journal: Economic Policy 2: 180-212
- Saez, Emmanuel, Manos Matsaganis, and Panos Tsakloglou, 2012, Earnings determination and taxes: evidence from a cohort-based tax reform in Greece, Quarterly Journal of Economics 127(1): 493-533

Organization and course requirements: Each student is assigned one of the above listed research papers. In an effort to ensure a fair distribution of papers to students, the assignment process will be random. The course's grade is based on: a presentation of 25 minutes (40%), a written term paper (50%) and participation during the discussions in the seminar (10%). The course language is English. That is, presentation, discussion and term paper will have to be in English. Presentation: In the 25-minute presentation, the student presents and discusses the research paper that s/he is assigned. The presentation will usually be structured as follows:

research question, contribution to the literature, empirical research strategy, main results, discussion of limitations, and policy implications. Please keep in mind for the presentation that your fellow students in the class are not familiar with the paper and/or the research method used. The presentation should be concise and finished within the 25 minutes frame. Participation during class: After each presentation, all students are asked to contribute clarifying questions and critical arguments. Term paper: The term paper should take the form of a typical referee report. That is, you write a report to the (fictitious) editor of a (fictitious) top economics journal that is regarding the research paper you are assigned to. This report usually consists of a summary of the paper, a statement on novelty and contribution to the literature, evaluation of real-world relevance and policy impact, the main limitations of the paper, points that could be addressed and improved by the authors, as well as a recommendation to the editor whether the paper should be either accepted as it is, revised and resubmitted to the journal after improvements, or rejected. Please keep in mind for the report that the editor may not have read the paper in detail. The referee report should be between 12 and 15 pages (font size 12). Further information: Students will be assigned the research paper after registering to the course. Contact: Prof. Dr. Clemens Fuest: fuest @zew.de Mathias Dolls: dolls@zew.de Philipp Dörrenberg: doerrenberg@zew.de

E585 Topics in Multiple Time Series Analysis (Seminar)

Trenkler

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 lecture on multiple time series analysis. 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.

Prerequisites: E601, E602, E603 (or equivalent), Lecture on Multiple Time Series Analysis

ECTS credits: 5.0

Start: 07.09.2015 End: 07.12.2015 Monday, 12:00 to 13:30 in L9, 1-2 002

The maximum number of participants in the seminar is limited to 14.

Requirements for the assignment of ECTS-Credits and Grades: Seminar paper (75%) and two presentations (25%).

Further details on the seminar and the topics will be posted on the seminar's webpage in due time.

Contact:

Prof. Dr. Carsten Trenkler, e-Mail: trenkler@uni-mannheim.de, L7, 3-5, Raum 105, Tel. 181-1852

E599 Empirical Environmental Economics (block seminar)

Wagner

Goals and Contents 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.

Expected Competences acquired after completion of the module: Ability to present academic research to semi-expert audience Ability to critically reflect on academic research, and to articulate criticism and suggestions for improvement.

Prerequisites: E601,E603 (or equivalent)

ECTS credits: 5.0

Organizational Meeting: Tuesday 15.09.2015, 12:00 to 13:30 in L7, 3-5 410

Block seminar:

Friday 20.11.2015, 9 am to 5 pm, in L9, 7, Seminar room 509

Saturday 21.11.2015, 9 am to 5 pm, in L9, 1-2, Seminar room 002

Requirements for the assignment of ECTS-Credits and Grades: Presentation (40%), report (40%), class room discussion (20%)

Contact: Prof. Ulrich Wagner, PhD, Tel. (06221) 181 - 1420, E-Mail: ulrich[dot]wagner[at]uni[minus]mannheim[dot]de, Office: L7, 3.-5, S.03, Office hours: by appointment

E859/E5011 Institutional Economics and Economic Policy (lecture)

Grüner

Goals and Contents of the module:

The Role of institutions in economic policymaking/Ordnungspolitik

Overview of the course

Game theory: a short introduction

Mechanism Design (Basic setup//The revelation principle in dominant strategies// The Gibbard Satterthwaite theorem// Bayesian implementation/the revelation principle)
Quasilinear environments (VCG mechanisms// AGV mechanisms// Participation constraints// The Myerson Satterthwaite theorem// Robust possibility theorems// Auctions// Optimal mechanisms// Robust mechanism design)

Preference aggregation (Theory// Experimental evidence)
Information aggregation in committees (Theory// Experimental evidence)
Financing public goods (Theory// Experimental evidence)
Mechanisms for fiscal stability
Economic policy and credit markets
Mechanisms for monetary policy

Expected Competences acquired after Completion of the Module: Students learn about theories of information aggregation in institutions. They learn to apply them to practical problems.

Prerequisites: PhD students/Master of Economic Research students: E700-E703, E801-E806 Master of Economics students (fall 2015 only): Participants should ideally have received a grade of at least 2.3 in E601 (or an equivalent course). If in doubt, please contact the course instructor.

ECTS credits: 7.5

Start: 07.09.2015 End: 07.12.2015

Monday, 15:00 to 17:15 in L9, 1-2, room 003

Please note! Course level: Ph.D. (cross-listed for Master students in fall term 2015 only)

Requirements for the assignment of ECTS-Credits and Grades: written exam (90 minutes)

Contact person: Prof. Dr. Grüner, Tel. (06221) 181-1886, E-Mail: gruener@unimannheim.de, Office: L7, 3-5, room 2-06

E868/E5010 Topics in Business Cycles I (lecture)

Pfeifer

Goals and Contents of the Module: The global financial and economic crisis has thrown business cycle research into a state of disarray and has shown the need to go beyond traditional business cycle explanations. After reviewing the evidence on traditional drivers of the business cycle, the course will give an introduction to the rapidly expanding literature on non-traditional business cycle explanations like "news" and "uncertainty" shocks. Along the way, the participants will learn how to implement these shocks into structural macroeconomic (DSGE) models and to estimate the models using (mostly) Bayesian methods.

Expected Competences acquired after Completion of the Module:

Broad knowledge of the modern business cycle literature technical skills to solve and estimate DSGE models >br>ability to formulate research idea and plan

Prerequisites: PhD students: E 700- E703, E 801- E806 (or equivalent courses in

Macroeconomics and Econometrics)

Master students (fall 2015 only): Participation requires a grade of at least 2.3 in E602 (or an

equivalent course). Alternatively, sufficient knowledge of DSGE modelling in the form of e.g. prior seminar work must be proven. If in doubt, please contact the course instructor.

ECTS credits: 5.0

Start: 09.09.2015 End: 09.12.2015

Wednesday, 13:45 to 15:15 in L9, 7, room 308

Please note! Course level: Ph.D. (cross-listed for Master students in fall term 2015 only)

Requirements for the assignment of ECTS-Credits and Grades: term paper

Literature: Mostly research articles but we will also draw from the book "Structural Macroeconometrics" Princeton University Press, 2nd Edition by David N. DeJong and Chetan Dave

Contact person: Johannes Pfeifer, Tel. 181-3430, e-Mail: pfeifer@uni-mannheim.de, L 7, 3-5, room 242.

E5012/E823 Advanced Time Series Analysis (lecture + exercise)

Jentsch

Goals and Contents of the Module: The lecture will mainly cover asymptotic analysis related to time series models. Partly, empirical issues are discussed as well. We will deal with univariate time series models, unit root asymptotics, multivariate VAR models, bootstrap methods, and, depending on time, with VARMA models and cointegration.

Expected Competences Acquired after Completion of the Module:

The students have acquired the necessary demanding econometric, statistical and mathematical techniques to understand and solve theoretical problems in univariate and multiple, time series analysis, i.e. in special fields of econometrics. They are able to understand methodologically demanding specialist literature and, based on that, can extend their methodological knowledge independently. They are able to sort out relevant literature for problem solving, i.e. they can analyze and synthesise the special literature. The students have acquired basic tools for empirical time series analysis and can understand empirical time series literature. Based on their methodological expertise, they are able to independently extend their knowledge in order to conduct own empirical analyses. The students can formulate research questions, are able to analyze and address them, and can present, discuss, and defend research results in written and oral form.

Prerequisites:

PhD students and Master of Economic Research students: E700-E703 and E801-E806; other programs: E700, E703, E803 and E806 or equivalent courses.

Master of Economics students (fall 2015 only): E601-E603, E508 Multiple Time Series Analysis (spring 2015, Trenkler)

ECTS: 9

Start: 07.09.2015 End: 07.12.2015

Lecture: Monday, 15:30 to 17:00 in L7, 3-5, P0 043

Exercise: Wednesday, 10:15 to 11:45 in L9 1-2, 002

Please note! Course level: Ph.D. (cross-listed for Master students in fall term 2015 only)

Literature: Hamilton, J.D. (1994), Time Series Analysis, Princeton University Press; Hayashi, F. (2000), Econometrics, Princeton University Press; Lütkepohl, H. and Krätzig, M. (2004), Applied Time Series Econometrics, Cambridge University Press; Davidson R. and MacKinnon, J.G. (2004) Econometric Theory and Methods, Oxford University Press.

Contact: Dr. Carsten Jentsch, e-Mail: Carsten Jentsch cjentsch<at>mail.uni-mannheim.de L7, 3-5, Raum 129, Tel. 181-1938

E5013/E894 Computational Economics (lecture + exercise)

Dürnecker

Course Level: Ph.D. (cross-listed for Master students in fall term 2015)

Prerequisites: PhD students: E 700- E703, E 801- E806

Master students (fall 2015 only): Participation requires a grade of at least 2.3 in E602

Advanced Macroeconomics (or an equivalent course).

Requirements for the Assignment of ECTS Credits and Grades: 5 Exercises (50%), Term Project (50%)

Goals and Contents of the Module:

This course provides an introduction to numerical tools for computing equilibria in economic models. The main emphasis is on learning the methods and their practical implementation. The course will require students to use standard computer programming languages (such as Matlab, Fortran or C). We study a variety of topics, including projection methods, approximation of functions and stochastic processes, sparse grid methods, numerical quadrature, root-finding, homotopy methods, calibration, parallel programming (OpenMP, MPI) and GPGPU computing. Moreover, we explore a number of applications in labor search, inequality and business cycles to illustrate the practical use of the methods presented in the course.

Expected Competences acquired after Completion of the Module:

Students are able to numerically solve quantitative economic models, to simulate the equilibrium, and to calibrate and estimate the structural model parameters. Students learn to solve the following class of models: the neoclassical growth model, overlapping-generations models, labor search and matching models and heterogeneous agents models with idiosyncratic and aggregate risk. Furthermore, students learnto use economic models together

with quantitative research methods to study theoretical questions, but also to confront theory with the data in a consistent manner.

ECTS-credits: 7

Teaching Method: lecture (2 SWS) + exercise (1 SWS)

Start: 11.09.2015 End: 23.10.2015

Friday, 15:30 - 20:30 in L9, 7, room 308 (ATTENTION: session on 11.09.2015 takes place in L9, 1-2, room 002!)

Contact person: Georg Dürnecker, Tel. 181-1804, e-Mail: duernecker@uni-mannheim.de, L 7, 3-5, room 246.