

COURSE SYLLABI

A) RESEARCH METHODOLOGY COURSES

Course Code:		Course Title: PHILOSOPHY OF SCIENCE	
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:		Total Hours:
Instructor:			
1. COURSE OBJECTIVES	This course gives both a theoretical overview on the foundations of (philosophy of) science and a hands-on introduction into practicing science and knowledge creation.		
1.1. Prerequisites	The course builds on the Philosophy and History of Economic and Business Research course.		
1.2. CONTENTS	<p>In the first part we explore what science is, what its goals are, what it does, how it works, what its limits are, and what are its basic assumptions about knowledge, methods, the world, etc. We take a closer look at the processes involved in developing scientific knowledge/models; we follow the path from the phenomenon of interest, via the processes of observation, measuring, interpreting data, applying statistical methods, forming hypotheses, constructing scientific models/theories, making predictions and experimental designs, and finally "manipulating" the phenomenon of interest in an experiment (or simulation). These knowledge processes are reflected from the perspective of your respective discipline and research questions. We will discover that it is not really clear what the epistemological status of the resulting (scientific) knowledge is and—as a consequence—we will have to question classical concepts of science, such as that science gives us a true and objective picture of the world, that science is independent of observer and cultural influences, etc. Alternative concepts, such as Kuhn's scientific paradigms, the constructivist perspective, and others will be discussed as possible ways out.</p> <p>The second part of this course addresses a crucial process in science: the generation of (radically) new knowledge. Students will conduct a practical knowledge creation project in interdisciplinary teams. The goal of this project is to achieve an expertise in state-of-the-art knowledge creation techniques (and their theoretical background), such as dialogue, reflection, world café, making explicit implicit assumptions, U-theory/ presencing, different modes of deep observation, conducting generative interviews, deep knowing/understanding, etc. This part of the course aims at practically</p>		

	experiencing this socio-epistemological process/technology of generating (radically) new (scientific) knowledge in an interdisciplinary and collaborative context.
2. TEACHING/ASSESSMENT	
<i>Description</i>	
2.1. Teaching Methods	<p>The main didactical goal of this course is to learn by jointly generating, sharing, negotiating, and creating (new) knowledge. This course makes use of a wide variety of didactical elements contributing to reaching the learning outcomes in a well-orchestrated design. Among these measures are:</p> <ul style="list-style-type: none"> – preparing presentations and whole didactical designs for a specific topic – close reading of texts – collaborative knowledge construction using face-to-face and virtual knowledge techniques – observation techniques, deep observation – generative interview, appreciative interview – co-creating (radically new) knowledge – coaching elements offered by teachers – dialogue – discovering, exploring, and negotiating hidden assumptions and mental models <p>All methods include student presentations and discussions based on student individual and group assignments.</p>
<i>Description</i>	
2.2. Student Assessment Methods	Formal evaluation is based on class participation, individual and group assignments, written test, and a seminar paper (draft PhD research proposal).
3. TEXTBOOK(s)	<ol style="list-style-type: none"> 1. Braybrooke, David (1986). <i>Philosophy of Social Science</i>. Prentice Hall.. 2. Flyvbjerg, Bent (2001). <i>Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again</i>. Cambridge. 3. Hollis, Martin (1994). <i>The Philosophy of Social Science: An Introduction</i>. Cambridge.. 4. Little, Daniel (1991). <i>Varieties of Social Explanation : An Introduction to the Philosophy of Social Science</i>. Westview Press.. 5. Rosenberg, Alexander (1995). <i>Philosophy of Social Science</i>. Westview Harper Collins.

Course Code: Course Title: RESEARCH METHODOLOGY

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1.COURSE OBJECTIVES	<p>This course aims to develop students' abilities to design and carry out methodologically sound and practically relevant empirical research in business and economics. It is designed to give students a solid foundation for working on individual and group research projects and the ability to be informed users of research results presented and/or published by others (e.g. fellow researchers and research institutions, governments, press).</p> <p>Learning outcomes:</p> <ul style="list-style-type: none"> – Enhanced general and specific knowledge in the field of research methodology. – Enhanced software skills. <p>Further development of debating, writing, and presentation skills.</p>		
1.1. Prerequisites	The course builds on the Philosophy and History of Economic and Business Research course.		
1.2. CONTENTS	<ol style="list-style-type: none"> 1. Business and economic research in the broader scientific context. 2. Conceptual foundations of research in business and economics: <ul style="list-style-type: none"> – Concepts, definitions, theories and models. – Research approaches, strategies and designs. 3. Research ethics in theory and practice. 4. Measurement issues in business and economics: <ul style="list-style-type: none"> – Theory of measurement. – Levels of measurement. – Reliability and validity. – Measurement issues in quantitative and qualitative research. 5. Data typologies and data quality. 6. Secondary data search: <ul style="list-style-type: none"> – Sources of secondary data. – Search and evaluation techniques. 7. Primary data collection: <ul style="list-style-type: none"> – Observation studies. – Experimental studies. – Surveys. 8. Sampling: approaches and strategies. 9. Analytical methods: 		

	<ul style="list-style-type: none"> – Typologies. – Quantitative analysis in business and economics. – Qualitative analysis in business and economics. <p>10. Research report preparation:</p> <ul style="list-style-type: none"> – Theory and practice of effective written research results communication. <p>Theory and practice of effective oral research results communication.</p>
2. TEACHING/ASSESSMENT	
<i>Description</i>	
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments.
<i>Description</i>	
2.2. Student Assessment Methods	Formal evaluation is based on class participation, individual and group assignments, written test, and a seminar paper (draft PhD research proposal).
3. TEXTBOOK(s)	<ol style="list-style-type: none"> 1. Frankfort-Nachmias Chava and Nachmias David (2000): Research Methods in the Social Sciences. New York: Worth Publishers. 2. Greenfield Tony, ed. (2003): Research Methods for Postgraduates. London: Arnold.

Course Code: Course Title: QUALITATIVE AND QUANTITATIVE RESEARCH

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<p>This course aims to develop students' abilities to design and carry out methodologically sound and practically relevant empirical research of qualitative nature.</p> <p>Learning outcomes:</p> <ul style="list-style-type: none"> – Ability to apply relevant techniques of qualitative and quantitative data collection and analysis. – Enhanced software skills to solve practical business problems. 		
1.1. Prerequisites	Required background knowledge includes basic statistics, sampling and statistical inference, data collection, linear regression analysis,		
1.2. CONTENTS	<ol style="list-style-type: none"> 1. Theoretical foundations of qualitative research. 2. History and ethics of qualitative research. 3. Qualitative research in practice: <ul style="list-style-type: none"> – Typologies of approaches and methods. – Phenomenology. – Structural analysis. – Observation studies. – Case studies. – Other techniques and approaches. – Specifics of qualitative research within specializations of doctoral program. 4. Qualitative data analysis. 5. Probability and statistics <ul style="list-style-type: none"> – Probability and probability distributions – Sampling distribution theory – Theory of Statistical inference 6. Quantitative data analysis: <ul style="list-style-type: none"> – Multivariate data analysis <ul style="list-style-type: none"> o Principal components o Factor analysis o Discriminant analysis o Clustering – Maximum likelihood estimation – Generalized linear models (GLM) <ul style="list-style-type: none"> o ANOVA and ACOVA o Logit and probit models o Multinomial and ordinal logistic regression – Hierarchical (multilevel) models 		

	<ul style="list-style-type: none"> – Structural Equation Modelling – Network analysis <ul style="list-style-type: none"> ○ Network »descriptive« statistics ○ Block modelling ○ Stochastic models for static and dynamic networks – Other methods according to specific students' needs and advances in methodology
2. TEACHING/ASSESSMENT	
<i>Description</i>	
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments.
<i>Description</i>	
2.2. Student Assessment Methods	Formal evaluation is based on class participation, individual and group assignments, a project of qualitative and a project of quantitative nature.
3. TEXTBOOK(s)	<ol style="list-style-type: none"> 1. Bentz, V. M. and Shapiro, J. J. (1998): Mindful Inquiry in Social Research. Thousand Oaks, CA: Sage. 2. Coffey, A., and Atkinson, P. (1996): Making Sense of Qualitative Data: Complementary Research Strategies. Thousand Oaks, CA: Sage. 3. Dobson A. J.: An Introduction to Generalized Linear Models, 2002, Chapman&Hall. 4. Hair, Tatham, Anderson, Black: Multivariate Data Analysis, 1998, PrenticeHall 5. Hogg, Tanis: Probability and Statistical Inference, 2001, Prentice-Hall 6. Doreian, Ferligoj, Batagelj: Generalized Blockmodelling. 7. Eliason S.R.: Maximum Likelihood Estimation: Logic and Practice, 1993, Sage. 8. Gummesson Evert (2000): Qualitative Methods in Management Research. Thousand Oaks: Sage. 9. Kaplan D.: Structural equation modelling : foundations and extensions, 2000, Sage. 10. Maxwell Joseph A. (2005): Qualitative Research Design: An Interactive Approach. Thousand Oaks, CA: Sage. 11. Snijders T.A.B., Bosker R.: Multilevel Analysis, 1999, Sage.

Course Code:	Course Title: MODEL BUILDING AND OPTIMIZATION		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	This class is an applications-oriented course covering the modelling of large-scale systems in decision-making domains and the optimization of such systems using state-of-the-art optimization tools. Application domains include: transportation and logistics planning, pattern classification and image processing, data mining, design of structures, scheduling in large systems, supply-chain management, financial engineering, and telecommunications systems planning. Modelling tools and techniques include linear, network, discrete and nonlinear optimization, heuristic methods, sensitivity and post-optimality analysis, decomposition methods for large-scale systems, and stochastic optimization.		
1.1. Prerequisites			
1.2. CONTENTS	This class is a computational and application-oriented introduction to the modelling of large-scale systems in a wide variety of decision-making domains and the optimization of such systems using state-of-the-art optimization software. Application domains include transportation and logistics, pattern classification, structural design, financial engineering, and telecommunications system planning. Modelling tools and techniques covered include linear, network, discrete, and nonlinear optimization, heuristic methods, sensitivity and post-optimality analysis, decomposition methods for large-scale systems, and stochastic optimization. This course is oriented around computation and computation-related issues in developing and solving large-scale optimization models.		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments		
<i>Description</i>			
2.2. Student Assessment Methods	Formal evaluation is based on class participation, individual and group assignments, written test, and a seminar paper (draft PhD research proposal).		
3. TEXTBOOK(s)	<ol style="list-style-type: none"> 1. Bertsimas, D., and J. Tsitsiklis. <i>Introduction to Linear Optimization</i>. Belmont, MA: Athena Scientific, 1997. ISBN: 1886529191. 2. Van Hentenryck, Pascal. <i>The OPL Optimization Programming Language</i>. Cambridge, MA: MIT Press, 1999. ISBN: 0262720302. 		

Course Code:	Course Title: MULTIVARIATE BUSINESS STATISTICS		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<ul style="list-style-type: none"> – Understanding the principles of selected multivariate business statistics techniques – Realising how to use these techniques in scientific work – Applying the techniques in a practical data analysis project 		
1.1. Prerequisites			
1.2. CONTENTS	<p>The course consists of three parts. In the first part, the theoretical principles of selected multivariate techniques are presented by the lecturer. Since not all the material can be covered in the lecture, careful reading of the relevant chapters in the textbook is necessary. In the second part, the participants are expected to present a scientific article in which one or more multivariate techniques are used (mid-term presentations). In the third part, the participants conduct a practical data analysis project with a given data set. For data analysis, the SPSS package is utilized. The written seminar papers have to be handed over to the lecturer one week before the end-term presentation by the latest.</p>		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments		
<i>Description</i>			
2.2. Student Assessment Methods	<ul style="list-style-type: none"> • Seminar paper • Mid-term presentation (article) • End-term presentation (project) 		
3. TEXTBOOK(s)	<ol style="list-style-type: none"> 1. Hair, J.F.Jr., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L. (2006): Multivariate Data Analysis, 6th ed., Prentice Hall 2. [Supplemental Literature: Backhaus, K., Erichson, B., Plinke, W., Weiber, R. (2006): Multivariate Analysemethoden, 11. Aufl., Springer 		

Course Code:	Course Title: PANEL DATA ECONOMETRICS		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<p>This course provides a theoretical and empirical overview of econometric techniques that may be used when studying panel data. Panel data are pooled observations of a cross-section of units such as individuals, households, firms, states, countries, etc. The number of pooled observations per unit does not have to be the same, but that case does present some further complications. When feasible, the theoretical discussion of econometric techniques will be illustrated with empirical studies that use those same techniques.</p> <p>Student Learning Objectives/Outcomes This course promotes student learning in various ways.</p> <ul style="list-style-type: none"> – An ability to evaluate the advantages and disadvantages of panel data as compared to other data structures – An understanding of econometric techniques for panel data – Ability to apply these techniques in appropriate data conditions – Exposure to applications in various fields of economics – Enhanced presentation and writing skills 		
1.1. Prerequisites			
1.2. CONTENTS	<p>Introduction Dynamic panel data model Unbalanced panel data models Special topics Limited dependent variables Nonstationary data</p>		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments		
<i>Description</i>			

2.2. Student Assessment Methods	<ul style="list-style-type: none"> • Seminar paper 40 Percent • Mid-term presentation (article) 30 Percent • End-term presentation (project) 30 Percent
3. TEXTBOOK(s)	<p>Required Textbook Badi H. Baltagi, <i>Econometric Analysis of Panel Data</i>, Chichester, UK: John Wiley & Sons, 2005.</p> <p>Other Helpful Course Materials The following texts may be useful to students of the econometrics of panel data. The reading list refers to some of these texts explicitly. Greene, W., <i>Econometric Analysis</i>, 5th ed., Prentice Hall, 2003. Hsiao, C., <i>Analysis of Panel Data</i>, Cambridge University Press, 1st ed., 1986, 2nd ed., 2004. Wooldridge, J., <i>Econometric Analysis of Cross Section and Panel Data</i>, MIT Press, 1999 Arellano, M., and B. Honore, "Panel Data Models: Some Recent Developments." In J. Heckman and E. Leamer, eds., <i>Handbook of Econometrics</i>, Volume 5, Chapter 53, North Holland, 2001.</p> <p>The following papers should be read: B. Baltagi and J. Griffin (1983). "Gasoline demand in the OECD: an application of pooling and testing procedures." <i>European Economic Review</i>, 22, 117-137. B. Baltagi, J. Griffin and W. Xiong (2000) "To pool or not to pool: Homogeneous versus heterogeneous estimators applied to cigarette demand." <i>Review of Economics and Statistics</i>, 82 (1), 117-126. B. Baltagi and D. Levin (1992). "Cigarette taxation: raising revenues and reducing consumption." <i>Structural Change and Economic Dynamics</i>, 3, 321-335. B. Baltagi and N. Pinnoi (1995). "Public capital stock and state productivity growth: further evidence for an error components model." <i>Empirical Economics</i>, 20, 351-359. C. Cornwell and P. Rupert (1988). "Efficient estimation with panel data: an empirical comparison of instrumental variable estimators." <i>Journal of Applied Econometrics</i>, 3, 149-155. D. Harrison and D. Rubinfeld (1978). "Hedonic housing prices and the demand for clean air." <i>Journal of Environmental Economics and Management</i>, 5, 81-102. A. Munnell (1990). "Why has productivity declined? Productivity and public investment." <i>New England Economic Review</i>, 3-22.</p>

Course Code: Course Title: QUALITATIVE RESEARCH METHODS

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<p>The course introduces participants to qualitative approaches in data collection & analysis and aims to provide students with the knowledge and capabilities for designing qualitative as well as integrated (qualitative- quantitative) research.</p> <p>Starting from a theoretical basis provided at the beginning of the course, participants will be guided through an entire qualitative research project throughout the semester. Additionally, questions and practical problems experienced by students in their own doctoral research can be discussed.</p>		
1.1. Prerequisites			
1.2. CONTENTS	<p>Starting from a theoretical basis provided at the beginning of the course, participants will be guided through an entire qualitative research project throughout the semester. Additionally, questions and practical problems experienced by students in their own doctoral research can be discussed.</p>		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments		
<i>Description</i>			
2.2. Student Assessment Methods	<p>Depending on the progress in your dissertational project, you can choose one of the following tasks as assignment (2,000 – 2,500 words) to be handed in.</p> <p>1. Paper Summary: If you are in a nearly stage in your dissertation, summarize three papers on research applying qualitative (or mixed) research methodology in your field of research.</p> <p>2. Method Chapter: If you are in a more advanced stage in your dissertation, write an outline of your dissertation describing how you integrate qualitative research methodology in own dissertational research project.</p>		

	<p>Research Project</p> <p>The goal of the Research Project is to actually conduct qualitative research guided by one of the instructors. Depending on the stage of your dissertation, you either work on your own qualitative data <i>or</i> are provided with data by the instructors.</p> <p>The outcome of this Research Project is a Research Report. The idea is that this report takes the form of a publishable paper (which, in the best case, can be submitted to a Journal of your choice).</p>
<p>3. TEXTBOOK(s)</p>	<p>Recommended Reading</p> <ol style="list-style-type: none"> 1. Flick, Uwe (2006). <i>An Introduction to Qualitative Research</i>, 3rd ed, Sage, London 2. Saunders, Mark/Lewis, Philip/Thornhill, Adrian (2007): <i>Research Methods for Business Students</i>, 4th Ed., Prentice Hall/Pearson Education

Course Code: Course Title: STRUCTURAL EQUATIONS MODELING

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	The course seeks to provide a user-friendly introduction to structural equations modelling (SEM) using the LISREL program. It is designed for non-experts and the emphasis is squarely on understanding and applying SEM as a tool in substantive research.		
1.1. Prerequisites	The course is designed for PhD students and assumes previous knowledge of data analysis and statistics (including factor analysis and regression).		
1.2. CONTENTS	<p>- exposing the reader to the major steps associated with the formulation and testing of a model under the LISREL</p> <p>- describing the key decisions associated with each step - highlighting potential problems and limitations associated with LISREL modeling</p> <p>- assisting the interpretation of LISREL input and output files. The overall aim is to provide a critical understanding of what is really involved in LISREL modelling and sensitize the reader against 'mechanically' fitting or modifying models.</p> <p>Concrete examples are used throughout to illustrate issues relating to model conceptualization, specification, identification, estimation, evaluation, modification, and cross-validation and illustrated with actual program output.</p>		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	The course will take the form of interactive workshop sessions, placing particular emphasis on student participation. Theoretical discussion of key SEM issues will be accompanied by practical demonstration of the use of the LISREL program. Guidance for setting up and interpreting the relevant input/output program files will also be provided. Students are expected to download the (free) student version of the LISREL program (www.ssicentral.com) and also read widely on the subject (see below).		
<i>Description</i>			
2.2. Student Assessment Methods	This will take the form of a project on using LISREL to estimate and evaluate structural equation models. Full details will be given in the first session.		
3. TEXTBOOK(s)	<p>The required text for the course is: Diamantopoulos, A. and Siguaw, J.A. (2000): <i>Introducing LISREL</i>, Sage Publications</p> <p><i>Additional Reading</i> A selected list of readings on SEM in general and LISREL in particular</p>		

is given below; all readings are in a folder in the BWZ Fachbibliothek.

Anderson, J. C. & Gerbing, D. W. 1988. Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103: 411-423.

Bagozzi, R. P. & Yi, Y. 1988. On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1): 74-94.

Baumgartner, H. and Homburg, C. 1996. Applications of Structural Equation Modelling in Marketing and Consumer Research. A review. *International Journal of Research in Marketing*, 13: 139-161.

Bollen, K. A. & Lennox, R. 1991. Conventional Wisdom on Measurement: A Structural Equation Perspective. *Psychological Bulletin*, 110: 305-314.

Churchill, G. A. 1979. A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16: 64-73.

Danes, J.E. and Mann, K.O. 1984. Unidimensional Measurement and Structural Equation Models with Latent Variables. *Journal of Business Research*, 12: 337-352.

Diamantopoulos, A. & Winklhofer, H. 2001. Index Construction with Formative Indicators: An Alternative to Scale Development. *Journal of Marketing Research*, 37: 269-277.

Mackenzie, S. B. 2001. Opportunities for Improving Consumer Research through Latent Variable Structural Equation Modeling. *Journal of Consumer Research*, 28 (1): 159-166.

Ping R.A. Jr. 2004. On Assuring Valid Measures for Theoretical Models Using Survey Data. *Journal of Business Research*, 57(2): 125-141.

Steenkamp, J. B. E. M. & Baumgartner, H. 2000. On the Use of Structural Equation Models for Marketing Modelling. *International Journal of Research in Marketing*, 18: 195-202.

Steenkamp, J. B. E. M. & van Trijp, H. C. M. 1991. The Use of LISREL in Validating Marketing Constructs. *International Journal of Research in Marketing*, 8: 283-299.

Useful Websites

- Jason Newsom's homepage (www.upa.pdx.edu/IOA/newsom) has a comprehensive collection of books and articles on practically every aspect of structural equation modelling.
- Ed Rigdon's homepage (www.gsu.edu/~mkteer/index.html) is a treasure grove of online resources on structural equation modelling.
- The Working Group Structural Equation Modelling at the University of Münster (www.unimuenster.de/SoWi/struktur) is useful website.

Course Code: Course Title: TIME SERIES ECONOMETRICS

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<p>The main objective of this course is to develop the skills needed to do empirical research in fields operating with time series data sets. The course aims to provide students with techniques and receipts for estimation and assessment of quality of economic models with time series data. Special attention will be placed on limitations and pitfalls of different methods and their potential fixes. The course will also emphasize recent developments in Time Series Analysis and will present some open questions and areas of ongoing research. The course provides a survey of the theory and application of time series methods in econometrics. Topics covered will include univariate stationary and non-stationary models, vector autoregressions, frequency domain methods, models for estimation and inference in persistent time series, and structural breaks. We will cover different methods of estimation and inferences of modern dynamic stochastic general equilibrium models: simulated method of moments, maximum likelihood and Bayesian approach. The empirical applications in the course will be drawn primarily from macroeconomics.</p>		
1.1. Prerequisites			
1.2. CONTENTS	<ol style="list-style-type: none"> 1. Introduction to stationary time series 2. Multivariate stationary analysis 3. Univariate non-stationary processes 4. Multivariate non-stationary 5. Simulated GMM 6. Likelihood Methods 7. Bayesian methods 		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments		
<i>Description</i>			
2.2. Student Assessment Methods			
3. TEXTBOOK(s)	Hamilton, James D. <i>Time Series Analysis</i> . Princeton, NJ: Princeton University Press, 1994. ISBN: 9780691042893.		

Brockwell, Peter, and Richard Davis. *Time Series: Theory and Methods*. New York, NY: Springer-Verlag, 1998. ISBN: 9780387974293.

Canova, Fabio. *Methods for Applied Macroeconomic Research*. Princeton, NJ: Princeton University Press, 2007. ISBN: 9780691115047.

DeJong, David, and Chetan Dave. *Structural Macroeconometrics*. Princeton, NJ: Princeton University Press, 2007. ISBN: 9780691126487.

Course Code:	Course Title: EXPERIMENTAL AND SIMULATION METHODS		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	This course gives an overview of simulation methods (first two sessions).		
1.1. Prerequisites			
1.2. CONTENTS	<p>Each student will discuss a scientific paper on a specific simulation approach with application to a certain field (e.g., marketing, organization, production, logistics, innovation and technology management, life sciences, health care). Students can choose from preselected papers. As students are highly encouraged to select a field in relation to their PhD-project, they might also choose another more relevant paper for them (third session).</p> <p>All participants will then outline ideas how to best implement this approach by any logic (fourth session), and will finally present the implementation of the approach in any logic (fifth session).</p>		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures, in-class and computer lab exercises, seminars. All methods include student presentations and discussions based on student individual and group assignments		
<i>Description</i>			
2.2. Student Assessment Methods			
3. TEXTBOOK(s)	<p>Brennan A., Chick S., Davies R., <i>A taxonomy of model structures for economic evaluation of health technologies</i>, in: Health Economics 15:1295-1310, 2006</p> <p>Hayden F.G., <i>The Inadequacy of Forrester System Dynamics Computer Programs for Institutional Principles of Hierarchy, Feedback, and Openness</i>, in: Journal of Economic Issues 40(2), 2006</p> <p>Cooper K., Brailsford S., Davies R., <i>Choice of modelling technique for evaluating health care technologies</i>, in: The Journal of Operational Research 58, 2007</p> <p>Vensim® Tutorial, Reference manual, and Modeling Guide, Ventana Systems Inc., 1997, http://www.vensim.com/</p>		

Course Code:	Course Title: GAME THEORY		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	This course is an investigation of the evolutionary and epistemic foundations of solution concepts, such as rationalizability and Nash equilibrium. It covers classical topics, such as repeated games, bargaining, and supermodular games as well as new topics such as global games, heterogeneous priors, psychological games, and games without expected utility maximization.		
1.1. Prerequisites			
1.2. CONTENTS	Introduction (Nash, Perfect, Sequential Equilibrium, Rationalizability, Correlated Equilibrium, Backward Induction, Forward Induction, Sequential Rationality, Self Confirming Equilibria) Repeated Games Cheap Talk, Signaling, and Reputation, Bargaining Theory Supermodular Games Learning and Evolutionary Foundations Epistemic Foundations Global Games Heterogeneous Beliefs Psychological Games Game Theory with Non-Expected Utility		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures and in-class exercises.		
<i>Description</i>			
2.2. Student Assessment Methods	Formal evaluation is based on class participation, individual assignments, written test.		
3. TEXTBOOK(s)	Osborne, and Rubinstein. A Course in Game Theory. Cambridge, MA: MIT Press, 1994. Fudenberg, Drew, and Jean Tirole. Game Theory. Cambridge, MA: MIT Press, 1991. Kreps, David M. Notes on the Theory of Choice. Boulder, CO: Westview Press, 1988. Weibull, Jörgen. Evolutionary Game Theory. Cambridge, MA: MIT Press, 1995. ISBN: 0262231816. Fudenberg, Drew, and David K. Levine. The Theory of Learning in Games. Cambridge, MA: MIT Press, 1998.		

B) OBLIGATORY COURSES IN ECONOMICS

Course Code:		Course Title: ADVANCED MICROECONOMICS	
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:		Total Hours:
Instructor:			
1.COURSE OBJECTIVES	<p>The purpose of the course is to give an introduction to some of the main topics in this field: adverse selection (signaling, screening), moral hazard, mechanism design, and communication in organizations. First, the course focuses on the role of private information in people's incentives to work (or to shirk), to distinguish themselves and to communicate (or to lie). Second, it studies the question of how to design optimal mechanisms, compensation schemes and organizations <i>given</i> people's private information.</p> <p>Learning outcomes:</p> <ul style="list-style-type: none"> – Enhanced general and specific knowledge in the field of information economics and contract theory 		
1.1. Prerequisites	Introduction in Microeconomics and Game Theory		
1.2. CONTENTS	<p>1. Information economics</p> <ul style="list-style-type: none"> (a) Adverse Selection (b) Signaling and Screening (c) Reputation and Cheap Talk Games (d) Non-linear Pricing <p>2. Contract theory</p> <ul style="list-style-type: none"> (a) Moral Hazard and Optimal Incentive Contract (b) Dynamic Moral Hazard (c) Implicit Incentive and Career Concerns (d) Property Right and Incomplete Contract Theory <p>(3) Mechanism Design and Auctions</p> <ul style="list-style-type: none"> (a) Basic Mechanism Design (b) Efficient Mechanism (c) Auction <p>4. Communication and Organizational Design</p> <ul style="list-style-type: none"> (a) Computer science approach (b) Incentive approach 		
2. TEACHING/ASSESSMENT			

<i>Description</i>	
2.1. Teaching Methods	Lectures, in-class and exercises, seminars
<i>Description</i>	
2.2. Student Assessment Methods	Formal evaluation is based on class participation, individual and group assignments, written test.
3. TEXTBOOK(s)	Mas-Colell, Whinston, & Green (MWG), 1995, <i>Microeconomic Theory</i> . Milgrom and Roberts (1992), <i>Economics, Organization and Management</i> . Fudenberg, D. and J. Tirole (1991), <i>Game Theory</i> , Cambridge: MIT Press. Laffont and D. Martimort, (2001), <i>The Theory of Incentives</i> , Princeton University Press.

Course Code: Course Title: **ADVANCED MACROECONOMICS**

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:		Total Hours:
Instructor:			
1. COURSE OBJECTIVES	The first part of this course will concentrate on developing the tools and concepts necessary to understand the modern macroeconomic theory — discrete time dynamic programming and continuous time optimal control. The study of specific models will take aback seat to mastering the techniques.		
1.1. Prerequisites			
1.2. CONTENTS	<ol style="list-style-type: none"> 1. Overview of the Macroeconomics. 2. Dynamic Programming and Optimal Control <ul style="list-style-type: none"> – Discrete Time Dynamic Programming – Continuous Time Optimal Control 3. Applications <ul style="list-style-type: none"> – Consumption and Savings - Ramsey model – One-Sector Model of Economic Growth – Investment with Adjustment Costs 4. <i>Numerical Solution Methods</i> <ul style="list-style-type: none"> – Value Function Iteration – Policy Function Iteration – LQ Problem – Log-Linearization 5. Competitive equilibrium with complete markets 6. Ricardian equivalence 7. Fiscal Policies in Growth Model 8. Recursive Competitive Equilibria 9. Asset Pricing 10. Optimal Taxation with Commitment 11. Fiscal-Monetary Theories of Inflation 		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Method of teaching will be lectures combined with exercise sessions.		
<i>Description</i>			
2.2. Student Assessment Methods	There will be 6-7 graded problem sets, a midterm and a final. The weights are: Problem Sets: 10% Midterm: 40% Final: 50%		
3. TEXTBOOK(s)	Main readings:		

	<p>B D. Bertsekas: <i>Dynamic Programming and Optimal Control</i>, Athena Scientific, 2005.</p> <p>BF Blanchard, O. and S. Fisher: <i>Lectures on Macroeconomics</i>. MIT Press, 1989.</p> <p>LS Ljungquist, Lars, and Thomas J. Sargent: <i>Recursive Macroeconomic Theory</i>. Cambridge: MIT Press, 2000.</p> <p>SL Stokey, Nancy L., Robert E. Lucas, Jr., and Edward C. Prescott: <i>Recursive Methods in Economic Dynamics</i>. Cambridge: Harvard University Press, 1989.</p> <p>Ljungquist, Lars and Thomas J. Sargent: <i>Recursive Macroeconomic Theory</i>. First Edition. MIT Press. 2000.</p> <p>Ljungquist, Lars and Thomas J. Sargent: <i>Recursive Macroeconomic Theory</i>. Second Edition. MIT Press. 2004</p> <p>Optional Textbooks</p> <p>Kamien, Morton I. and Nancy L. Schwartz: <i>Dynamic Optimization. The Calculus of Variations and Optimal Control in Economics and Management</i>. Amsterdam: Elsevier, 1991.</p> <p>Michael D. Intriligator: <i>Mathematical Optimization and Economic Theory</i>. Philadelphia: SIAM, 2002.</p> <p>Articles:</p> <p>Blanchard, O., "What Do We Know About Macroeconomics that Fisher and Wicksell Did Not?" <i>OJE</i>, November 2000, 115:4, 1375-1410.</p> <p>Woodford, M., "Revolution and Evolution in Twentieth-Century Macroeconomics," forthcoming in P. Gifford, ed., <i>Frontiers of the Mind in the Twenty-First Century</i>, Harvard University Press. (Available at www.princeton.edu/~woodford/macro20c.pdf)</p>
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C) OBLIGATORY COURSES IN MANAGEMENT/BUSINESS

Course Code:	Course Title: Decision Analysis		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:		Total Hours:
Instructor:			
1. COURSE OBJECTIVES	This course gives a thorough introduction into fundamental concepts of decision theory. The focus of the course is on methods for decision making and their axiomatic foundation. Software packages that are used in decision modelling and analysis are used to provide functionality of decision analysis models. These theoretical concepts are linked to empirical results to discuss their empirical validity and the possibility to apply them in a real world setting, or use them as the basis for applied research projects.		
1.1. Prerequisites			
1.2. CONTENTS	1 Introduction to preference modeling: Relations and scales 2 Multidimensional evaluation Dominance and efficiency 3 Decisions under risk: Introduction to expected utility theory 4 Applications and extensions to expected utility theory 5 Dynamic decision problems and the value of information 6 Multicriteria decisions: additive models 7 Multicriteria decisions: Non-compensatory models		
2. TEACHING/ASSESSMENT			
<i>Description (%)</i>			
2.1. Teaching Methods			
<i>Description (%)</i>			
2.2. Student Assessment Methods	Assignments (20%) Project (40%) Final exam (40%)		
3. TEXTBOOK(s)	Winston, W.L., Albright, S.C., Practical Management Science, Duxbury – Thomson Learning, 2001 Raqsdale, C., Spreadsheet Modeling & Decision Analysis: A Practical Introduction to Management Science, South-Western College Pub, 2007 Goodwin, P., Wright, G., Decision Analysis for Management Judgment, Wiley 2004 Edwards, W., Miles, R.F., Winterfeld, D., Advances in Decision Analysis: From Foundations to Applications, Cambridge University Press, 2007		

D) ELECTIVE COURSES

The syllabi for elective courses are given in a short format. Each teacher will develop a more detailed syllabus according to the structure and profile of doctoral candidates.

D-1. ELECTIVE COURSES OF THE PHD PROGRAM IN ECONOMICS

1. Applied Econometrics

Modelling of adaptive behaviour of economic agents, adaptive expectations model, partial adjustment model, rational expectations models, models of qualitative choice, interpretation and parameter estimation, binary-choice models, forecasting with a simultaneous equations model, simulation approach in econometrics, econometric policy evaluation and optimisation using Monte Carlo method, use of econometric models for alternative macroeconomic policy.

2. Environmental Economics and Policy

Environmental problems as problems of allocation of resources, environment, externalities, nature goods as public and private goods, property rights, macroeconomic and microeconomic of environment, concepts of environmental policy, economics, politics and policy of global environmental problems, environmental and natural resource policy of the BiH in the process of association to European union.

3. Business, Government and Society (Business Environment)

Business environment: contradicting views on the business-government-society relationship, market and government: ideal and reality, the business environment in different countries, corporate social responsibility, anti-monopoly policy, cartels, monopolisation, mergers and acquisitions, government and regulatory policy: energy, telecommunications, transportation, business ethics, government and business environment, government support to business.

4. Economics of Transition

Understanding transition, political constraints and reform strategy, aggregate uncertainty, complementarities and speed of reforms, political constraints, the political economy of privatisation, allocative changes, the speed of price liberalisation, government collapse and economic performance, governance changes, government intervention in firms, comparing policies of privatisation and restructuring, the role of the state, the rule of law, corruption.

5. Globalisation of World Economy

Definitions of globalization, patterns, major issues, evolution of the global economy, globalization of trade, globalization of investments and TNCs, outsourcing, global shift of production, globalisation and services, globalization and Inequality/Poverty, Convergence, Growth, social implications of Globalization: Women, Child labor & Labor standards, Culture, Democracy, Corporations & Environment.

6. History of Economic Thought

Waves of economic theory, ancient and medieval economic thought, mercantilism, preclassical authors, classical political economy: Smith, Ricardo, Malthus, Mill, socialist ideas in economics, Alfred Marshall and the rise of neoclassical economics, institutionalism and theories of cycles, keynesian revolution, neoclassical synthesis, monetarism and new classical economics, supply-side Economics, new and post Keynesian Economics, new Institutional Economics.

7. International Finance

Main concepts in international finance (balance of payments, exchange rates, foreign exchange market and its characteristics, international parity conditions, managing of risks), evolution of the international monetary system , selected topics in international finance (European public finances, European monetary integration, international financial flows and macroeconomic aggregates, official and private sources of international finance.

8. Economy of B&H

Introduction: key characteristics of the B&H economy, economic growth, unemployment, inflation, balance of payments, institutional changes from socialist to the market economy: privatisation and governance structure, new institutions and structure, firms' performance in post-privatisation period, fiscal policy and public finance reform, FDI, B&H and EU, liberalization and regulation of public sector, international competitiveness of B&H.

9. Economics and Management of Public Administration

Organisation of public government, changes in state government, theory of bureaucracy, ethic in public government and it's management, local and regional conditions of the performance of public administration, the role of state in organisation of public administration, distribution of political power, roles of public government in different types of local-regional social systems, praxis of organisational management in public administration, roles of manager.

10. Comparison of Economic Theories

Methodological issues and the role of methodology, neoclassical theories before 1930s and since 1930s, the importance of the development of neoclassical macroeconomics and the methodological approach of M. Friedman, Keynes and his methodological approach, neokeynesian synthesis, postkeynesian economics, neoricardian economics, Schumpeter, institutionalisms, neoaustrian economics, marxian political economy, franche structuralism.

11. Regional Economic Analysis

The concepts of regional development and growth, the position of the region in national economy, "sector-based" analysis of the regional economy, the substance of the fundamental localisation theories, differentiation of the production costs and application of the models "input - output" in spatial analysis, economic utilisation of the territory, economic aspects of the spatial organisation and regional economic functions of the cultural - historical heritage.

12. Competitiveness, Industrial Performances and Economic Growth

Competition, regulation and governance, competition, innovation, technology and economic development, aims and scope of competition policy, competitiveness of state, industrial economics as the foundation of competition policy, social framework of economic competitiveness and growth, determinants of growth in modern economies, changing political environment: national, regional and international forces.

13. World Economy

Brief history of the world economic development, global production, outsourcing and logistics, global trade and regional economic integration, FDI and global money system, strategies for internationalisation of business operations, economics of population and urbanisation, divergences and poverty, role of innovation, technological development and the human capital, natural resources and environment, social capital.

14. Economics of Innovation

Nature of technology, sources of innovations and technological changes, knowledge, definitions, types, knowledge as a property and human capital, national innovation systems and technology policy, institutional framework for technology development and innovativeness, interaction between industrial research, academic science and engineering, diffusion and transfer of technology, university role, framework for an innovation and technology strategy.

15. Topics in Sustainable Development

Environmental science and sustainable development: the state of the world sustainability, environmental ethics and economics, the origins of the sustainability problems and concepts of sustainability, environmental systems: chemistry, energy and ecosystems, air pollution and global climate change, sustainable energy, freshwater and marine resources, business and sustainable development, sustainable development and social justice/equality.

D-2. ELECTIVE COURSES FOR PHD PROGRAM IN BUSINESS

1. Advances in Business Economics

Standard and advanced microeconomic theory, theory of the firm, the role of microeconomic in the decision making, demand theory, demand estimation, production and costing, production functions, market behaviour, market regulations, the role of macroeconomics in decision making, money and capital markets, fiscal policies,

2. Marketing Theory

Scope of marketing; history of marketing science, origin of marketing thoughts, philosophy of marketing science; history and development of marketing thought; boundaries of marketing, marketing and social/economic changes, toward a general theory of marketing

3. Theory of Consumer Behaviour

Theoretical background of consumer behaviour, analysis of consumer problems, consumer policies, consumer behaviour models, consumer protection, societal aspects of marketing operations, ethical issues in consumer behaviour and marketing

4. Strategic Marketing Management

Philosophy of marketing management, objectives, strategy and management in marketing, marketing mix management, international marketing management, advances in product, distribution, promotion and pricing models, integrated marketing strategies

5. Advances in Accounting Theory and Management

Traditional and new approaches in accounting theory, financial accounting, cost accounting, managerial accounting, concepts and methods of financial statements, financial reporting, analysis of financial reports, financial ratios, breakeven analysis, profitability, accounting standards, international accounting, accounting standards and EU

6. Advanced Financial Management

Advanced Capital Budgeting and Value Creation, Portfolio Analysis, Advanced Capital Structure and Current Debate on Dividend Taxation, Initial Public Offerings, Options in Corporate Finance: Real Options and Advanced Securities, Financial Contracting, Issues in investments, issues in corporate analysis, Corporate Governance, and Current Debate,

Financial Distress and Privatization of Bankruptcy, Corporate Hedging and Risk Management, contemporary financial management issues.

7. Theory of Finance, financial markets and institutions

Advanced topics in the areas of corporate finance, financial markets, international finance, financial instruments, financial institutions, portfolio theory, investment and portfolio analysis, developing financial models, portfolio decisions, security issues in capital markets, decision making under uncertainty, pricing theory, asset pricing models.

8. Corporate Strategies

Advances in strategic management, theories of strategic management, strategic business environments, strategic decision making models, mergers, acquisitions, divestments, diversification, competitive strategies, resource based view, dynamic capabilities, strategy implementation, strategic leadership.

9. Theory of Organization and Management

Organizational system, organizational processes, organizational structure, organizational efficiency, organizational effectiveness, modern organization theories and approaches, resource interdependences, population ecology. Foundations of management and organizations, evolution of management thought, pioneering contributions, scientific management, early administrative theories, approaches to bureaucracy, human relations and behavioral science approaches, systems thinking, open-system approaches.

10. Advances in Human Resources Management

Challenges in HRM, human resource planning, job analysis and design, recruitment policies and procedures, employee selection, orientation and placement, career planning, compensation management, motivation and satisfaction, stress management, time management, retention strategies, employee benefits and services.

11. Advanced Business Statistics

Advanced topics in probability, theoretical distributions, law of large numbers, parametric statistics, estimation, confidence intervals, hypothesis testing, regression and correlation analysis, analyse of variance, time series analysis, forecasting methods, design of experiments, using integrated statistical software packages

12. Advances in Management Information Systems

Management information and control systems, managerial aspects of IT utilization, Information systems in creating competitive advantages, impact on transforming organizations, IS design techniques and methodologies, use of IT for strategic and operational decision making

13. Advances in Information Technology Management

Managing information resources, IT management function in organization, continuous computing, continuous computing technologies, disaster recovery management, business continuity, business continuity management, IT management standards and regulations, human resources in IT management,

14. Business Law

Advances in business law, private law, civil law, B&H and EU public law, tax law, labour and social security law, law of EU, criminal law in business, foreign investments laws, laws of international trade, laws of intellectual properties

15. Theory of Networks

Strategic alliances, joint ventures, franchising, consortia, clusters, cooperatives and virtual networks; application of transaction cost economics, property rights theory, information economics, resource-based theory, real options theory and the relational view of networks.

16. Directed Reading In Management

Guided readings in management research. Supervised research and writing a research paper in topics of interest to doctoral student.

D-3. ELECTIVE COURSES FOR DBA PROGRAM

1. Advanced Marketing Communications

Advances in marketing communication strategy, process and models of marketing communications, advertising, media planning, sales promotion, public relations, direct and online marketing

2. Strategic Marketing Management

Philosophy of marketing management, objectives, strategy and management in marketing, marketing mix management, international marketing management, advances in product, distribution, promotion and pricing models, integrated marketing strategies

3. Advanced Marketing Research

Scientific methods for marketing research, planning for marketing research, collecting data, measurement methods, using sampling methods, advanced statistical techniques, forecasting methods, marketing information system, international marketing research

4. Advanced Business Economics

Standard and advanced microeconomic theory, theory of the firm, the role of microeconomic in the decision making, demand theory, demand estimation, production and costing, production functions, market behaviour, market regulations, the role of macroeconomics in decision making, money and capital markets, fiscal policies,

5. Advances in Cost Accounting

Traditional and new approaches in accounting theory, financial accounting, cost accounting, managerial accounting, concepts and methods of financial statements, financial reporting, analysis of financial reports, financial ratios, breakeven analysis, profitability, accounting standards, international accounting, accounting standards and EU.

6. Advances in Financial Management

Advanced Capital Budgeting and Value Creation, Portfolio Analysis, Initial Public Offerings, Options in Corporate Finance: Real Options and Advanced Securities, Financial Contracting, Issues in investments, issues in corporate analysis, Corporate Governance, and Current Debate, Financial Distress and Privatization of Bankruptcy, Risk Management, contemporary financial management issues

7. Advances in Managerial Accounting

Advances in managerial accounting concepts, financial reporting, business success indicators, relationships between balance sheet and profit/loss account, added value analysis, costs/income analysis, performance measures, accounting information system

8. Financial Markets and Institutions

Advanced topics in the areas of corporate finance, financial markets, international finance, financial instruments, financial institutions, portfolio theory, investment and portfolio analysis, developing financial models, portfolio decisions, security issues in capital markets, decision making under uncertainty, pricing theory, asset pricing models.

9. Corporate Strategies

Advances in strategic management, theories of strategic management, strategic business environments, strategic decision making models, mergers, acquisitions, divestments, diversification, competitive strategies, resource based view, dynamic capabilities, strategy implementation, strategic leadership.

10. Advances in Human Resources Management

Challenges in HRM, human resource planning, job analysis and design, recruitment policies and procedures, employee selection, orientation and placement, career planning, compensation management, motivation and satisfaction, stress management, time management, retention strategies, employee benefits and services.

11. Advanced Business Statistics Methods

Advanced topics in probability, theoretical distributions, law of large numbers, parametric statistics, estimation, confidence intervals, hypothesis testing, regression and correlation analysis, analyse of variance, time series analysis, forecasting methods, design of experiments, using integrated statistical software packages

12. Advances in Management Information Systems

Management information and control systems, managerial aspects of IT utilization, Information systems in creating competitive advantages, impact on transforming organizations, IS design techniques and methodologies, use of IT for strategic and operational decision making

13. Advances in Information Technology Management

Managing information resources, IT management function in organization, continuous computing, continuous computing technologies, disaster recovery management, business continuity, business continuity management, IT management standards and regulations, human resources in IT management,

14. Business Law

Advances in business law, private law, civil law, B&H and EU public law, tax law, labour and social security law, law of EU, criminal law in business, foreign investments laws, laws of international trade, laws of intellectual properties

15. Directed Reading In Business Administration

Guided readings in business administration. Supervised research and writing a research paper in topics of interest to the DBA student.

addendum

E) OTHER ELECTIVE COURSES

Course Code:	Course Title: ECONOMICS		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:		Total Hours:
Instructor:			
1. COURSE OBJECTIVES	This course focuses on recent developments in the field of economic policy in connection to real economy. The topics include main topics from three area: economic policy, macroeconomics and microeconomics.		
1.1. Prerequisites			
1.2. CONTENTS	<p>Economic Policy: The theory and practice of Economic policy in the World, the EU and the B&H. Fiscal and monetary policy. Economic policy in open economies. The political aspects of Economic policy. Structural policy. Trade policy. Policy of the protection of Economic competition. The public sector. Policy of reallocation. Social policy. Labour market policy. Regional policy. Theoretical foundations of economic policy. Macroeconomic policy. Post-Keynesian theories of distribution and price and their economic policy implications. Economic policy in the open economy. Social consensus and decision-making in economic policy. External economic equilibrium and methods of its analysis. Possibilities and preconditions of government decisions. Theory of expectations and its development, and the role of the chosen expectations model in the determination of the role of the government in the economy. Theories of economic growth. Coordination mechanism in the economy, and theoretical starting points of the B&H economy transition</p> <p>Microeconomics: The aim of the subject is to provide a deeper theoretical background for the application of Economic disciplines and subjects at doctoral level to the study of Economics. The goal of the above passage is to explain and actively practice the analytical apparatus used for this purpose. Consumer theory explains consumer's decisions and the formation of demand including the risk factor. Firm theory explains technological and market limits. The aim of analysis of the production factor market is to understand the formation of the optimal number of approaches. The synthesis of both markets introduces the theory of general equilibrium. At the end of the subject students are acquainted with the obstacles caused by the introduction of efficiency.</p>		

	<p>Macroeconomics: This passage contains following problems: Determinants of economic equilibrium in free sectors model. Determination simultaneous equilibrium in the goods market and money (assets) market in the model IS – LM and effectiveness of the fiscal and monetary policy by model IS – LM. Open economy and determination of output. Net exports and determination aggregate demand. Balance of payments and the curve of BP. Real exchange rate. Mundell – Fleming model. Absolute and relative versions of the theory PPP. Interest rate parity. Aggregate demand and its derivation through model IS –LM, its characteristics. Aggregate demand in an open economy in different situations of capital mobility under system fixed and flexible exchange rates. Derivation and definition of classical curve of aggregate supply – extreme case and basic position. Short – run keynesian aggregate supply. Other theoretical concepts of short – run aggregate supply. Labour market. Demand pull inflation and cost – push inflation and the model SP – DG. Adaptive and racional expectations. Method of curing inflation (cold turkey and gradualist method). Aggregate production function. Neoclassical model of the economic growth. Solow model and basic equation of growth accounting.</p>
2. TEACHING/ASSESSMENT	
<i>Description</i>	
2.1. Teaching Methods	
<i>Description</i>	
2.2. Student Assessment Methods	
3. TEXTBOOK(s)	<p>Economic Policy: Atkinson, Baker, Milward, Economic Policy, MacMillan 1996 Mankiw N.G.: Principles of Economics, The Dryden Press 1998 Persson, T., Tabellini, G., Political Economics: Explaining Economic Policy, MIT Press 2000 Nicholson, W.: Microeconomics Theory: Basic Principles and Extensions. 8.ed. South-Wastern-Thomson Learning 2002. Gordon, Robert J.: Macroeconomics. 8th ed. Addison Wesley, New York 2000.</p>

Course Code:	Course Title: INTERNATIONAL ECONOMICS		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	This course provides a graduate-level introduction to the field of international trade. It examines the theory of international trade and foreign investment with applications in commercial policy.		
1.1. Prerequisites			
1.2. CONTENTS	Topics include gains from trade, Ricardian models of technological differences, Heckscher-Ohlin models of factor endowment differences, intermediate input trade, wage inequality, imperfect competition, firm heterogeneity, multinational firms, international organization of production, dynamics, trade policy, trade and institutions, sorting in trade and FDI, and effects of geography on trade.		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods			
<i>Description</i>			
2.2. Student Assessment Methods			
3. TEXTBOOK(s)	<p>The reading list refers to the following books:</p> <p>Dixit, Avinash, and Victor Norman. <i>Theory of International Trade: A Dual, General Equilibrium Approach</i>. Cambridge, UK: Cambridge University Press, 1980.</p> <p>Feenstra, Robert. <i>Advanced International Trade: Theory and Evidence</i>. Princeton, NJ: Princeton University Press, 2003.</p> <p>Grossman, Gene, and Elhanan Helpman. <i>Innovation and Growth in the Global Economy</i>. Cambridge, MA: MIT Press, 1991.</p> <p>Grossman, Gene, and Kenneth Rogoff. <i>Handbook of International Economics</i>. Vol. 3. New York, NY: Elsevier, 1995.</p> <p>Helpman, Elhanan, and Paul R. Krugman. <i>Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Economy</i>. Cambridge, MA: MIT Press, 1987.</p> <p>Jones, Ronald, and Peter Kenen. <i>Handbook of International Economics</i>. Vol. 1. New York, NY: Elsevier, 1984.</p>		

Course Code: Course Title: LABOUR ECONOMICS

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<p>The course has three major goals to:</p> <ul style="list-style-type: none"> i) guide students through current theoretical and empirical understanding of key labor market and policy topics, ii) guide students to own empirical research, iii) make students familiar with research resources, standards and practices commonly used in the profession 		
1.1. Prerequisites			
1.2. CONTENTS	<p>LABOR SUPPLY MODELS</p> <ul style="list-style-type: none"> • Key terms and the framework. • Static model of labor supply, non-linear price lines, participation, overtime work, rationing, taxes and transfer schemes. • Home production, interpersonal transfers and earnings within families, allocation of (non)market time. • Labor supply over the life-cycle: Theory and evidence. • Aggregate models of labor supply. • Labor supply over the business cycle. • Labor force participation, taxes and selection bias. • Further evidence and estimation approaches. • Economics of migration. <p>MODELS OF WAGE STRUCTURES</p> <ul style="list-style-type: none"> • Basic human capital models, investment in schooling, on the job training, alternative interpretations. • Further evidence on the on-the-job training and tenure, general and specific human capital. • Theory of equalizing wage differentials. • Estimation approaches. • Schooling, education, and skills: demand, supply, and quality. <p>LABOR DEMAND</p> <ul style="list-style-type: none"> • Fundamental framework of static labor demand. <p>Dnamic labour demand models</p> <p>EMPIRICAL DATA</p> <ul style="list-style-type: none"> • Resources, problems, collection and measurement issues. 		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching	Method of teaching will be lectures combined with seminars		

Methods	
<i>Description</i>	
2.2. Student Assessment Methods	Seminar project and written exam.
3. TEXTBOOK(s)	<p>Ashenfelter, Layard, eds. Handbooks of Labor Economics [HLE]. Elsevier Science Publishers.</p> <ul style="list-style-type: none"> - Ashenfelter and Hallock, eds. Labor Economics. Brookfield, VT: Edward Elgar, 1995. - Ehrenberg and Smith, Modern Labor Economics - Hamermesh and Rees, The Economics of Work and Pay are introduction undergraduate texts. - Ashenfelter and Kevin Hallock, eds., Labor Economics, Brookfield, VT: Edward Elgar, 1995(4vols.). Reprints of some of the most influential articles in labor economics. <p>Katharine G. Abraham and Henri S. Farber, "Job Duration, Seniority, and Earnings," American Economic Review, Vol. 77, No. 3, (June 1987), pp.278-297.</p> <p>George J. Borjas, "Self-Selection and the Earnings of Immigrants," American Economic Review, Vol.77, No.4 (Sept 1987), pp.531-553.</p> <p>Charles Brown, "Equalizing Differences in the Labor Market," The Quarterly Journal of Economics," 94:1 (Feb 1980), pp.113-134.</p> <p>David Card , "The Impact of the Mariel Boatlift on the Miami Labor Market," Industrial and Labor Relations Review," 1999, pp. 245-257.</p> <p>David Card and Alan B. Krueger, "Labor Market Effects of School Quality: Theory and Evidence," NBER WP No.5450.</p> <p>Barbara Petrongolo and Christopher A. Pissarides, "Looking into the Black Box: A survey of the Matching Function," Journal of Economic Literature, Vol. XXXIX (June 2001), pp.390-431.</p> <p>Robert Topel, "Specific Capital, Mobility, and Wages," Journal of Political Economy: (1991), Vol. 99, pp.145-176.</p> <p>Robert J. Willis and Sherwin Rosen, Education and Self-selection," Journal of Political Economy: (1979), vol. 87, no.5, pt.2, pp.S7-36.</p> <p>Other journal articles on selected topics</p>

Course Code: Course Title: PUBLIC CHOICE

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<ul style="list-style-type: none"> - To give a broad background in public choice models - to develop student's abilities to model decisions faced by policy-makers in sound theoretical framework - to present current research in public choice 		
1.1. Prerequisites			
1.2. CONTENTS	<p>Democratic Pathologies</p> <ul style="list-style-type: none"> • Special Interest Groups and the Rise and Decline of Nations, Regulation as Rent Seeking. Political Business Cycles and Political War Cycles. Famine, Corruption, The Media and Democracy. Growth, Distribution, Taxation and some Big Questions of Development <p>Voting</p> <ul style="list-style-type: none"> • Votes vs. Dollars, majority rule. Voting systems – Substantive Effects. Minority Vote Dilution. District vs. at large systems. Runoffs and plurality rule. Gerrymandering. Paradoxes of Voting (Majority rule with pairwise comparisons, Cycling, Cycling Extended and the Seven Dwarfs, Cycling in continuous policy dimensions, Agenda setting and the killer amendment. The Arrow Impossibility Theorem. The Difference a Different Voting System can Make. Strategic Voting and The Gibbard-Satterthwaite Theorem. The Median Voter Theorem <p>Constitutional Economics</p> <ul style="list-style-type: none"> • Federalism. A Tax Constituion or Public Choice versus Public Finance. Term Limits. Court Politics. Soviet Style Bureaucracy 		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Method of teaching will be lectures combined with seminars		
<i>Description</i>			
2.2. Student Assessment Methods	Seminar project and written exam.		
3. TEXTBOOK(s)	<ul style="list-style-type: none"> - Alesina, A., N. Roubini, and G. D. Cohen. 1997. Political cycles in the United States. In <i>Political Cycles and the Macroeconomy</i>, 73-83. Cambridge, MA.: MIT Press. 		

	<ul style="list-style-type: none"> - Besley T. and R. Burgess. 2002. The Political Economy Of Government Responsiveness: Theory And Evidence From India. <i>The Quarterly Journal of Economics</i> 117 (4):1415-1451. - Brennan, Geoffrey and James M. Buchanan, <i>The Power to Tax: Analytical Foundations of a Fiscal Constitution</i>. Liberty Fund, Inc. 2000. Library of Economics and Liberty. 27 December 2005. - Carter, J. R., and D. Schap. 1990. Line Item Veto: Where Is They Sting? <i>Journal of Economic Perspectives</i> 4 (2):103-18. - Dixit, A., and B. Nalebuff. 1991. The strategy of voting. In <i>Thinking Strategically</i>, 259-85. NY: W.W. Norton & Co. - Djankov, S., C. McLiesh, T. Nenova, and A. Shleifer. 2003. Who Owns the Media? <i>Journal of Law and Economics</i> 46(2): 341-381. - Engerman, Stanley L. and Kenneth L. Sokoloff. 2001. Factor Endowments, Inequality, and Paths of Development among New World Economies. <i>Economia</i> 3.1 (2002) 41-109 - Gwartney, J. D., and R. E. Wagner. 1988. Public Choice and the conduct of representative government. In <i>Public Choice and Constitutional Economics</i>, ed. J. D. Gwartney and R. E. Wagner, 3-28. Greenwich, Conn.: JAI Press. - Helland, E. and A. Tabarrok. 2002. The Effect of Electoral Institutions on Tort Awards. <i>American Law and Economics Review</i> 4 (2): 341-370. - Lott, John R. Jr. 1999. Public Schooling, Indoctrination, and Totalitarianism. <i>Journal of Political Economy</i> 107 (6) pt. 2: S127-S157. - Mauro, Paolo. 1995. Corruption and Growth. <i>The Quarterly Journal of Economics</i>, Vol. 110, No. 3. (Aug., 1995), pp. 681-712. - Meltzer, A. H., and S. F. Richard. 1981. A Rational Theory of the Size of Government. <i>Journal of Political Economy</i> 89:914-27. - Peltzman, S. 1989. The economic theory of regulation after a decade of deregulation. In <i>Brookings Papers On Economic Activity: Microeconomics</i>, ed. M. N. Bailey and C. Winston, 1-41. Wash., D.C.: Brookings Institution. - Persson, T. and G. Tabellini. 1992. Growth, Distribution and Politics. <i>European Economic Review</i> 36:593-602. Reprinted in Persson and Tabellini (1994). - Shleifer, A., and R. Vishny. 1992. Pervasive Shortages Under Socialism. <i>Rand Journal of Economics</i> 23 (2):237-46. - Sen, Amartya. 1990. Public Action to Remedy Hunger. Tanco Memorial Lecture. London.
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Course Code: Course Title: ECONOMICS OF EUROPEAN INTEGRATION

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<ul style="list-style-type: none"> - to give the students a broad background of the economics of European integration - to develop student's abilities to analyze European economies - - to present current research of economics of European integration 		
1.1. Prerequisites			
1.2. CONTENTS	<ul style="list-style-type: none"> - The EMU macroeconomic framework: monetary policy - Monetary Theory and the ECB reaction function - Shock propagation and the optimal stabilization path - The EMU macroeconomic framework: fiscal policy - Public Deficit, Public Debt and Fiscal Sustainability - Heterogeneity and Risk insurance - Microeconomic and macroeconomic risks and social insurance - Federalism and Redistribution 		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Method of teaching will be lectures combined with seminars		
<i>Description</i>			
2.2. Student Assessment Methods	Seminar project and written exam.		
3. TEXTBOOK(s)	<ol style="list-style-type: none"> 1. Ballabriga, F. C. and C. Martinez-Mongay (2005). Sustainability of EU public finances. Economic papers European Commission, Directorate general for economic and financial affairs, No. 225. 2. Blanchard, O. and F. Giavazzi (2001). Macroeconomic effects of regulation and deregulation in goods and labor markets. NBER Working papers No. 8120. 3. Buti, M., S. Eijffinger, et al. (2003). Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment? Economic Papers European Commission, Directorate General for Economic and Financial Affairs, No. 180. 4. Buti, M., W. Roeger, et al. (2001). Monetary and Fiscal Policy Interactions under a Stability Pact. EUI Working Papers ECO, European University Institute, Department of Economics, No. 2001/8. 		

	<ol style="list-style-type: none"> 5. Gali, J. and R. Perotti (2003). Fiscal Policy and Monetary Integration in Europe. NBER Working papers No. 9773. 6. Hallett, A. H., J. Lewis, et al. (2004). Fiscal Policy in Europe, 1991-2003: An Evidence-based Analysis. London, Centre for Economic Policy Research (CEPR). 7. Lambertini, L. and R. Rovelli (2003). Independence or Coordinated? Monetary and Fiscal Policies in EMU. Monetary and Fiscal Policies in EMU. M. Buti. Cambridge, Cambridge University Press. 8. Willem H. Buiter, Clemens Grafe, 2002, Reforming EMU's Fiscal Policy Rules. Some Suggestions for Enhancing Fiscal Sustainability and Macroeconomic Stability in an Enlarged European Union in Buti, M. ed. Monetary and Fiscal Policies in EMU: Interactions and Coordination, Cambridge University Press, 2003, 92-145. 9. Persson, T., Tabellini G. (1996) Federal Fiscal Constitutions: Risk Sharing and Redistribution. Journal of Political Economy, 104 (5), 979-1009 10. Quah, Danny T. (1996) Regional convergence clusters across Europe. European Economic Review, 40, 951-958. <p>- Other journal articles on selected topics</p>
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Course Code: Course Title: INDUSTRIAL ORGANISATION

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<ul style="list-style-type: none"> - to give the students a broad background in industrial organization - to develop student's abilities to apply game theoretic approach to industry analysis - to present current research in industrial organization 		
1.1. Prerequisites			
1.2. CONTENTS	<ul style="list-style-type: none"> - Oligopoly and strategic interaction: Bertrand and Cournot - Barriers to entry, sunk costs, limit pricing, predatory pricing, collusion. - Product differentiation - The economics of industrial districts - Overview of the economics and regulation of network industries. - Patent races. Under and over-investment in R&D. Optimal patent length and breadth. Sequential innovation - Empirical Industrial Organization: main approaches and trends 		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Method of teaching will be lectures combined with seminars		
<i>Description</i>			
2.2. Student Assessment Methods	Seminar project and written exam.		
3. TEXTBOOK(s)	<p>Main references:</p> <ol style="list-style-type: none"> 1. Tirole, J. The Theory of Industrial Organization, MIT Press, 1989. 2. Shy, O. The Economics of Network Industries, Cambridge University Press, 2002. 3. Scotchmer, S. Innovation and Incentives. The MIT Press, 2004. <p>Journal articles on selected topics</p>		

Course Code: Course Title: MONEY AND FINANCE

Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<ul style="list-style-type: none"> - to give the students a broad background in money and finance - to develop student's abilities to understand monetary economics and policy and financial markets - to present current research in monetary economics and finance 		
1.1. Prerequisites			
1.2. CONTENTS	<ul style="list-style-type: none"> - Basic concepts and basic monetary models - Empirical evidence on money, activity and inflation. - Nominal rigidities - Empirical evidence on price setting and price behavior - Basic concepts of monetary policy - Target vs. policy rule - Overview of financial assets and markets - Brownian motion; arbitrage; option pricing; Black and Scholes model; risk neutral pricing - The term structure of interest rates; duration, short rate models - Asset pricing and the efficient market hypothesis - the mean-variance investor, the CAPM 		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Method of teaching will be lectures combined with seminars		
<i>Description</i>			
2.2. Student Assessment Methods	Seminar project and written exam.		
3. TEXTBOOK(s)	Main references: <ol style="list-style-type: none"> 1. Walsh, C. E. Monetary Theory and Policy, MIT Press, 2003. 2. Woodford, M. Interest and Prices: Foundations of a Theory of Monetary Policy, Princeton University Press, 2003. 3. Duffie, D. Dynamic Asset Pricing Theory, Princeton University Press, 2001. Journal articles on selected topics		

Course Code:	Course Title: BUSINESS ECONOMICS		
Level:	Year:	Semester:	ECTS credits:
Status: obligatory	Hours/Week:	Total Hours:	
Instructor:			
1. COURSE OBJECTIVES	<p>This course focuses on the application of microeconomic and new institutional economic theory to the practical problems faced by decision makers in business environment.</p> <p>After completing the course, the student will be able to:</p> <p>A. Identify a variety of economic problems faced by business organizations.</p> <p>B. Analyze the process of managerial decision making.</p> <p>C. Apply principles of economics to managerial problems.</p>		
1.1. Prerequisites	Introduction in microeconomics		
1.2. CONTENTS	<p>I. Markets, Organizations and the Role of Knowledge</p> <p>II. Economics of Strategy: Creating & Capturing Value</p> <p>III. Incentive Conflicts and Contracts</p> <p>IV. Property Rights and Incomplete Contracts</p> <p>V. Designing Organizational Architecture</p> <p style="padding-left: 20px;">A. Organizational Architecture</p> <p style="padding-left: 20px;">B. Decision Rights: The Level of Empowerment</p> <p style="padding-left: 20px;">C. Decision Rights: Bundling Tasks into Jobs</p> <p style="padding-left: 20px;">D. Attracting & Retaining Qualified Employees</p> <p style="padding-left: 20px;">E. Incentive Compensation</p> <p style="padding-left: 20px;">F. Individual Performance Evaluation</p> <p style="padding-left: 20px;">G. Divisional Performance Evaluation</p> <p>VI. Applications of Organizational Architecture</p> <p style="padding-left: 20px;">A. Vertical Integration, Networks and Outsourcing</p> <p style="padding-left: 20px;">B. Ethics and Organizational Architecture</p>		
2. TEACHING/ASSESSMENT			
<i>Description</i>			
2.1. Teaching Methods	Lectures and in-class exercises and students' presentations.		
<i>Description</i>			
2.2. Student Assessment Methods	Formal evaluation is based on class participation, individual assignments, written test.		
3. TEXTBOOK(s)	<p>Brickley, J.A., C.W. Smith, J.L. Zimmerman. Managerial Economics and Organizational Architecture, 4th Edition, New York: McGraw-Hill, 2006.</p> <p>Hendrikse, G.W. J. Economics and Management of Organization, McGraw-Hill 2003.</p>		

