



**FH Burgenland**

UNIVERSITY OF APPLIED SCIENCES

## **ECTS – Guide**

**International Joint Cross-Border PhD  
Programme in International Economic  
Relations and Management**

(9001)

Module

**WEC**

**World Economy**

Total ECTS: 5 ECTS

**Aim:**

The course aims to provide students with an understanding of structure and function of world economy with focus on resources (natural and human), structure (agriculture, manufacturing, services), international trade, and developing countries

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Course:

Course number	<b>PHD9001WEC01</b>
Description	<b>World Economy</b>
Type	<b>Combined course</b>
Semester	<b>1<sup>st</sup> Semester</b>
Teaching units	<b>30</b>
ECTS	<b>5 ECTS</b>

Evaluation method: **course with continuous assessment- essay, final written exam**

**Content:**

- Historical developments
- Population
- Resources and environment
- Agriculture
- Manufacturing
- Services
- International trade, trade patterns, and investment
- Development of developing countries

Module

**ECIN**

**Economics of Innovation**

Total ECTS: 5 ECTS

**Aim:**

The course aims to provide students with an understanding of economics of innovation and technology transfer as a major source of economic growth in modern countries and the critical factors for sustainable competitiveness of the economy of a country. The course educates students as future managers and economic experts to identify and manage innovation as a sustainable competitive advantage of the company or country. Knowledge provided through courses aimed at educating "leaders with a vision of the future" that will be able to identify the advantages and disadvantages of modern technology in the 21<sup>st</sup> Century

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Course:

Course number	<b>PHD9001ECIN01</b>
Description	<b>Economics of Innovation</b>
Type	<b>Combined course</b>
Semester	<b>1<sup>st</sup> Semester</b>
Teaching units	<b>30</b>
ECTS	<b>5 ECTS</b>

Evaluation method: **course with continuous assessment, essay, research paper**

**Content:**

On the course, the students are introduced to the latest advances in technology and innovation, access to innovation as an evolutionary process, the influence of market structure on innovation processes in the economy and the micro and macroeconomic foundations of innovation. Thematic sections of the course are:

- Introduction, terminology and measurement problems
- Innovation and endogenous economic growth
- Stimulating innovation and market failures
- Market structure and innovation
- Dissemination and transfer of innovation
- Strategic management of innovation in network market structures
- Impacts of the labor market on innovation
- Economic growth prospects and innovation

Module

**EPHIL**

**Economic philosophy**

Total ECTS: 5 ECTS

**Aim:**

The aim of the course is to familiarize students with the subject of economics and research methods, and economic disciplines, as well as the historical development of fundamental economic trends and philosophies (their knowledge) and its application in the professional and scientific life. The course is taught interpreting and understanding the methodology of economics, positivist and normative approach to economics and forecasting economic consequences under the influence of environment and government policies starting from the basic economic theory of Aristotle to the present. The course aims to provide students with basic knowledge of economic philosophy and their applicative applying appropriate type of their studies (diploma) and to develop the student's respect dimension of economic philosophy of larger social and political issues.

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Course:

Course number	<b>PHD9001EPHILO1</b>
Description	<b>Economic philosophy</b>
Type	<b>Combined course</b>
Semester	<b>1<sup>st</sup> Semester</b>
Teaching units	<b>30</b>
ECTS	<b>5 ECTS</b>

Evaluation method: **active participation, consultations, essay and research work**

**Content:**

Students learn about:

- Philosophical approach to economy
- Methodologies in economics
- The nature and importance of the economic philosophy
- Positivist and classical approach methodologies in economics
- The roots of modern economic theory
- Forecasts and their application in economics
- Alternative empirical approach (as opposed to econometrics)
- Rationality in economics
- Methodological individualist approach to economy
- Morality and ethics in economics
- Fundamental economic philosophy of history to the present

What is the economics; Economics and History; Economics and Sociology, Political Economy, Economics and logic, Economics and Philosophy, Methodology of positive and normative economics, History of philosophical discussions about the economy. Orthodox economics, heterodox economic thinking; Empirical economic methodology; Value judgments and economics; Philosophical perspective of economic thought, The role of intellectual philosophy, Economics, Specific character and content of economic science; Link between philosophy and economics; Philosophical Foundations of economic thought B.C.(Aristotle, Plato, Confucius and Kautilya, Stoicism) Influence of Christianity on economic thought (St. Augustine and Leibniz) Natural law - jus naturale and jus genitum (Cicero) Moral philosophy (Hutcheson and Smith); Dialectic and materialism (Hegland Marx); Utilitarianism (Bentham, Hume, Mill); Economic philosophy of modern economics (Buchanan, Coase, Hayek and Sen), Economic thought from mercantilism to the winner of the Nobel Prize in Economics; Significant debate in economics, Theory of social control and regulation; Marginal analysis of state policy; Welfare economics and inequality, Public choice, Consumer choice, Policy inflation, Growth and employment, Role of the State.

Module

**MAP**

**Macroeconomic Analysis and Policy**

Total ECTS: 5 ECTS

**Aim:**

The fundamental aim of the course training candidates and analytical skills necessary framework for decision-making in the private and public sectors. Introduction to advanced analytical models and techniques provides a better understanding of modern (dominant) micro-and macro-economic theories/issues. Candidates will upon completion of the course be able to:

- Detect the interaction between economic theory and economic policy.
- Consider the goals and the role of economic policy.
- Use the analytical framework and models of economic policy.
- Detect the state's role in the realization of the objectives of economic policy.
- Interpret the processes of macroeconomic management.
- Examine the mechanisms of employment and social protection of the population.
- Detect based welfare economics and its application.
- Use the applicable general equilibrium model.
- Use economic models of political analysis.
- Detect heterogeneity, conflict of interest policy and the distribution of wealth.

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Course:

Course number	<b>PHD9001MAP01</b>
Description	<b>Macroeconomic Analysis and Policy</b>
Type	<b>Combined course</b>
Semester	<b>2<sup>nd</sup> Semester</b>
Teaching units	<b>30</b>
ECTS	<b>5 ECTS</b>

Evaluation method: **active participation, course with continuous assessment, research work**

**Content:**

To familiarize students with the content, objectives and methods of economic analysis. The course candidates are introduced to the concept of economic policy, quantitative and qualitative forms, economic policy variables (data, objectives, instruments), structural relations and constraints, efficiency tools of economic analysis and policy.

Candidates learn about:

- Concept of economic analysis and policy,
- goals and objectives,
- instrumental variables,
- structural relations and constraints,
- institutions and economic reforms,
- the relationship between microeconomic analysis and public decision-making models,
- the Economic rationality of intervention in the market,
- valuation methods and policies,
- the role of cost-benefit analysis,
- models of economic policies and their implementation,
- the relationship between income distribution and public decision-making,
- the theoretical basis of economic policy making,
- analysis and their application to the acceptance and implementation of public programs,
- the application of economic analysis in the evaluation process of public decision-making,
- economics, environmental economics, resource planning economic development,
- microeconomic reforms, inequality and poverty,
- theories and models of growth,
- general equilibrium model, and their application.

Module

**ARM**

**Academic Research Methodology**

Total ECTS: 5 ECTS

**Aim:**

Students are guided through the researching and writing process to produce well-organized, clearly developed papers and thesis. PhD students will be able to write and evaluate articles from methodological point of view :

- Finding suitable sources.
- Developing critical approaches.
- Avoiding plagiarism.
- Being clear about research design
- Being clear about survey and basic data analysis methods

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Course:

Course number	<b>PHD9001ARM01</b>
Description	<b>Academic Research Methodology</b>
Type	<b>Tutorial</b>
Semester	<b>2<sup>nd</sup> Semester</b>
Teaching units	<b>30</b>
ECTS	<b>5 ECTS</b>

Evaluation method: **active participation, continuous assessment, research**

**Content:**

Part 1. The main rules of social and economic empirical research and publication

- Getting started with a scientific empirical article. The first steps of reading
- What were the main research objectives?
- Who did it? What was the main motivation? Who has supported it?
- The goals/objectives and conclusions have been matched?
- The main functions of literature
- Plagiarization
- Different reference styles

Part 2. Theoretical and methodological basics of empirical research

- Validity and reliability in social research
- Types of validity
  - criterion-related validity
  - construct validity
  - content validity

Part 3. Research design and basic data analysis

- Different researches
- Fundamental categories of research design
  - Conceptualization
  - Operationalization
  - The role of hypothesis

Part 4. Theoretical and methodological questions of data analysis

- Level of measurement
  - Nominal, ordinal, interval, ratio scales
  - Likert scale, Osgood scale, Bogardus scale, Guttman scale
  - Values and Attitudes Measurement
- Questions and Questionnaires
- Data analysis
  - One and two variables
  - Multivariate analysis

Module

**AMA**

**Advanced Statistics and Multivariate Analysis**

Total ECTS: 5 ECTS

**Aim:**

The purpose of the course is getting familiar with the statistical software used in data analysis, as well making comparisons with various types of statistical programs (SPSS, Statistica, Stata, R, E-views, Minitab), highlighting the advantages and disadvantages of each through socio-economic case studies. The course goes through the most commonly used statistical methods.

Multivariate statistical methods are indispensable in socio-economic analysis. There is a growing interest in the use of multivariate methods in marketing research, in social and economical research as well. The second part of the course goes through the most commonly used multivariate statistical methods through case studies: factor analysis, cluster analysis, discriminant analysis. These methods will be successfully used and applied by doctoral students in their own research field.

The course provides sound methodological and practical knowledge in order to support students in making high-standard analysis. The course materials consist of statistical data bases (eg.NSI, World Bank etc.), and empirical data collections. The applied software package is the SPSS.

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Course:

Course number	<b>PHD9001AMA01</b>
Description	<b>Advanced Statistics and Multivariate Analysis</b>
Type	<b>Workshop</b>
Semester	<b>2<sup>nd</sup> Semester</b>
Teaching units	<b>30</b>
ECTS	<b>5 ECTS</b>

Evaluation method: **active participation, continuous assessment, essay, individual research work**

**Content:**

On the course, the students are introduced to the advanced and multivariate statistical methods according to social and economic empirical research and students get practice in using statistical software. Statistical methods depend on the level of students statistical background and knowledge.

Curricular syllabus:

- Comparing the statistical softwares, advantages and disadvantages of Stata, Statistica, R, eViews, and SPSS. Searching in Collected databases (HDR, Worldbank, Eurostat, European Social Survey)
- Introduction to SPSS. Introductory Statistics: Descriptive statistics and graphs. Using SPSS.
- Parametric Tests of Hypotheses (using SPSS and Statistica)
  - Inference on One Population
  - Inference on Two Populations (t-test)
  - Inference on More than Two Populations (ANOVA)
- Empirical data collection: Analysis of Survey Data. (using SPSS)
  - Non-Parametric Tests of Hypotheses:
  - Contingency Tables
  - Crosstabulation
  - The Chi-Square Test of Independence
- Presentations
- Regression Analysis:
  - Simple Linear Regression
  - Nonlinear Regression
  - Multiple Regression
  - Logistic Regression

- Data reduction: Principal component analysis
- Statistical Classification: Cluster analysis
- Discriminant analysis
- Presentations