## **Opasraportti**

## TaTK - Economics 2009-2010 (2009 - 2010)

## **ECONOMICS**

The topics of interest for economics are rather diverse. The traditional division is to micro- and macroeconomics. In addition to these two main branches economics is divided into narrower subfields, which concentrate on specific problems. International economics, industrial organisation, money and banking, public finance, economic development, and environmental and resource economics are examples of such specialised areas of economics. Since economics is a tool oriented science a lot of emphasis in the curriculum is placed especially on quantitative methods and their applications to relevant problems.

After the basic level studies the student is familiar with the fundamental concepts in economics and the essential economic relationships. After the intermediate studies the student has obtained the knowledge of basic ideas in economic theory and methods, and is able to produce scientific writings. After the advanced levels studies the student has obtained skills to analytically solve economic problems and to conduct independent economic research.

#### **Basic studies:**

721210P Principles of Economics 5op 721115P Theory of Money, Banking and Monetary Policy 5op 721218P Principles of international Economics 5op 721313P History of Economic Thought 5op

## In addition at least 5 op of these:

721217P Public Sector Economics 5op 721236P Principles of Environmental Economics 5op 721237P Urban and Regional Economics and Policy 5op 721208P Additional Basic Level Courses in Economics 5op

## Intermediate studies 35op, in addition to basic studies:

721230A Seminar in Economics 10op 721215A Intermediate Macroeconomics 5op 721216A Intermediate microeconomics 5op 721220A Mathematical Economics 5op 721226A Basic Econometrics 5op

#### In addition at least 5 op of these:

721247A Analysis of Competition 5op 721343A Economics and Management of Intellectual Property 5op 721245A Development Economics 5op 721242A Labour Economics 5op 721248A Environmental and Resource Economics 5op 721241A Internship 5op 721002A Additional Intermediate Level Courses in Economics 5op

#### Advanced studies:

721330S Master's Thesis in Economics 30op 721310S Macroeconomic Analysis 6op 721320S Microeconomic Analysis 6op

## In addition at least 18 op of these:

721317S International Economics 6op
721342S Game Theory 6op
721333S Analysis of Competition 6op
721334S Advanced Environmental and Resource Economics 6op
721339S Ekonometric Analysis\*6op
721336S Special Issue in Economics 6op

721208P: Additional Courses in Economics, Basic Level, 0 op

# Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja - jaksot

721002A: Additional Courses in Economics, Intermediate Level, 0 op 721247A: Analysis of Competition, 5 op 721226A: Basic Econometrics, 5 op 721245A: Development Economics, 5 op 721339S: Econometric Analysis, 6 op 721343A: Economics and Management of Intellectual Property, 5 op 721248A: Environmental and Resource Economics, 5 op 721334S: Environmental and Resource Economics, 6 op 721241A: Field Project, 5 op 721342S: Game Theory, 6 op 721313P: History of Economic Thought, 5 op 721333S: Industrial Organization, 6 op 721215A: Intermediate Macroeconomics, 5 op 721216A: Intermediate Microeconomics, 5 op 721317S: International Economics, 6 op 721242A: Labour Economics, 5 op 721310S: Macroeconomic Analysis, 6 op 721330S: Master's Thesis, Economics, 30 op 721220A: Mathematical Economics, 5 op 721320S: Microeconomic Analysis, 6 op 721210P: Principles of Economics, 5 op 721236P: Principles of Environmental Economics, 5 op 721218P: Principles of International Economics, 5 op 721217P: Public Sector Economics, 5 op 721230A: Seminar in Economics, 10 op 721336S: Special Issue, 6 op 721115P: Theory of Money, Banking and Monetary Policy, 5 op 721237P: Urban and Regional Economics and Policy, 5 op

<sup>\*</sup> Recommended for students applying to doctoral studies.

## Opintojaksojen kuvaukset

## Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

## 721208P: Additional Courses in Economics, Basic Level, 0 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

Language of instruction:

Free.
Timing:
Free.

Learning outcomes:

To be agreed with Professor in Economics.

**Contents:** 

Depends on the course. Courses in other Finnish or foreign universities can also be included.

Assessment methods and criteria:

Depends on the course. Courses in other Finnish or foreign universities can also be included.

Person responsible:

The Professors of Economics.

## 721002A: Additional Courses in Economics, Intermediate Level, 0 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ecta.

Language of instruction:

Free.
Timing:
Free.

Learning outcomes:

To be agreed on with Professor in Economics.

Assessment methods and criteria:

Depends on the course. Courses in other Finnish or foreign universities can also be included.

Person responsible:

The Professors of Economics.

## 721247A: Analysis of Competition, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Maria Kopsakangas-Savolainen

Opintokohteen kielet: Finnish

#### **ECTS Credits:**

5 ects.

## Language of instruction:

English / Finnish.

Timing: Period D.

## Learning outcomes:

Upon successful completion of this course, students should be able to analyze and evaluate models of competitive, oligopolistic, and monopoly markets and understand how price and non-price competition among firms affect economic welfare. They should be also able to use principles of game theory in analyzing firms' strategic decisions and be able to intelligently speculate the motivates of real world pricing and other decisions of the firms. Students should also be ready to more advanced courses of industrial organization.

#### **Contents:**

Functioning of imperfect competition, monopoly, oligopoly (Cournot and Bertrand), cartel, price discrimination, product differentiation, principles of game theory, strategic behavior, innovations and research and development.

## Learning activities and teaching methods:

24 h lectures, home assignments and independent reading of the textbooks.

## Recommended optional programme components:

Principles of Microeconomics.

## Recommended or required reading:

L.M.B. Cabral, Introduction to Industrial Organization. MIT Press. 2000.

Availability of course books.

## Assessment methods and criteria:

Lectures and literature examination.

**Grading:** 

1-5.

#### Person responsible:

Assistant Professor Maria Kopsakangas-Savolainen.

## 721226A: Basic Econometrics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Pakola, Jukka Tero Johannes

Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

## **ECTS Credits:**

5 ects.

## Language of instruction:

Finnish. **Timing:** 

## Period D. **Learning outcomes:**

To learn the use of econometric models in the analysis of different economic phenomena.

#### **Contents:**

The main focus of this course is on the analysis of different economic phenomena.

## Learning activities and teaching methods:

26 hours of lectures, 21 hours of exercises and independent reading of the textbooks.

## Recommended optional programme components:

Basic statistical methods in economic sciences, Basic courses of mathematics.

## Recommended or required reading:

Hill, R., Griffiths, W., Judge, G.: Undergraduate Econometrics, 2nd ed.; Gujarati, D.N.: Basic Econometris, 4th ed.; other material announced during the lectures.

Availability of course books.

#### Assessment methods and criteria:

Lectures and a literature examination.

## **Grading:**

1-5.

## Person responsible:

D. Sc. Jaakko Simonen.

## 721245A: Development Economics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Puhakka Mikko Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

## Language of instruction:

Finnish, English if needed.

## Timing:

Periods B.

## Learning outcomes:

After completing the course the students will be familiar with the theory end most recent empirical results on economic development.

#### Contents:

Uneven distribution of wealth and income between nations; poverty; population growth; immigration, impact of economic policy on economic development.

## Learning activities and teaching methods:

Independent reading of the textbook.

## Recommended optional programme components:

Principles of Economics.

## Recommended or required reading:

Todaro, M.P & S.C. Smith: Economic Development. 10th ed., Addison Wesley, 2008.

Availability of course books.

## Assessment methods and criteria:

Literature examination.

#### **Grading:**

1-5.

## Person responsible:

Professor Juha Junttila.

## 721339S: Econometric Analysis, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Rahiala Markku Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

6 ects.

#### Language of instruction:

Finnish. **Timing:**Periods A-B.

#### Learning outcomes:

To deepen the students' knowledge of the use of statistical models when analyzing economic phenomena.

#### Contents:

Model diagnostics for linear and non-linear regression models, instrumental estimation, simultaneous-equation models and identifiability problems, general testing principles, vector autoregressive models, dynamic models for panel data, cointegration and long-term equilibria.

## Learning activities and teaching methods:

37 hours of lectures, 27 hours of exercises with PCGIVE-, PCFIML- and SAS-programmes. The lecture notes are available on the home pages of the lecturer

## Recommended optional programme components:

Basic Econometrics.

#### Recommended or required reading:

Harvey, A.: The Econometric Analysis of Time Series (2. edition), Philip Allen; Hayashi, F.: Econometrics. Princeton University Press; Gourieroux, C. & Monfort, A.: Statistics and Econometric Models, vol. 1 and 2. Cambridge University Press; Hsiao, C.: Analysis of Panel Data (2. edition), Cambridge University Press. Availability of course books.

## Assessment methods and criteria:

Lectures and/or literature examination.

## **Grading:**

1-5.

## Person responsible:

Markku Rahiala, Professor in Econometrics.

## 721343A: Economics and Management of Intellectual Property, 5 op

Voimassaolo: 01.08.2007 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail
Opettajat: Tuomas Takalo
Opintokohteen kielet: Finnish

## **ECTS Credits:**

5 ects.

## Language of instruction:

Finnish.
Timing:

Course is not lectured during the academic year 2009-2010.

## Learning outcomes:

After completion the course students should be able to apply economic way of thinking in analysing the impact of intellectual property rights to the strategy of business management, to the incentives on innovations and to the welfare.

#### **Contents:**

Patents and other intellectual property rights, protection strategies of intellectual property, competition policy and immaterial rights, immaterial rights in digital economy and in network industries.

## **Grading:**

1-5.

#### Person responsible:

Tuomas Takalo.

## 721248A: Environmental and Resource Economics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Mäntymaa, Erkki Paavo Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

#### Language of instruction:

Finnish\*

\*The course can be passed with a literature examination and a summary of a scientific article in English. The students wishing to do that should contact the teachers.

## Timing:

Period A.

## Learning outcomes:

Students can graphically and mathematically present the socially optimal level of pollution and define the efficiency conditions of the crucial policy instruments of pollution control. They can apply the most important methods for monetary valuation of environmental benefits and empirically analyse the demand of environmental commodities. In addition, students can formally present the models describing optimal use of natural resources and apply these models in practical decision making.

#### Contents:

With respect to environmental economics, the course consist of socially optimal pollution level, command-and-control regulation of pollution, pollution taxes, marketable permits, demand for environmental commodities, hedonic pricing methods, travel cost method, contingent valuation, and choice experiments. Regarding natural resources, the course covers topics on the optimal use of minerals (the Hotelling rule), the problem of open access in fishery, forest rotation models, and economics of forest conservation.

## Learning activities and teaching methods:

24 hours of lectures, 12 hours of exercises, and independent reading of study materials.

## Recommended optional programme components:

: Principles of Economics and Mathematical Economics.

## Recommended or required reading:

Kolstad, C.D. (2000): Environmental Economics; Hartwick & Olewiler (1998): The Economics of Natural Resources Use (2ed). (The required sections of the books and the other material will be informed later.) Availability of course books.

## Assessment methods and criteria:

Lectures and literature examination, written reporting of exercises.

## **Grading:**

1-5.

## Person responsible:

Academy Research Fellow Artti Juutinen and Assistant professor (acting) Erkki Mäntymaa.

## 721334S: Environmental and Resource Economics, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Mäntymaa, Erkki Paavo Opintokohteen kielet: English

Leikkaavuudet:

721248S Environmental and Resource Economics 6.0 op

721248A Environmental Economics 5.0 op

Voidaan suorittaa useasti: Kyllä

## **ECTS Credits:**

6 ects.

## Language of instruction:

Finnish / English.

**Timing:** Periods C-D.

## Learning outcomes:

Students can mathematically present the theory of pollution control, the models of optimal use of renewable and non-renewable resources, the theory and methods of valuation of environmental benefits and the economic problems of sustainable development.

#### **Contents:**

Market failure, pollution taxes, tradable pollution permits, transboundary pollution problems, scarcity of natural resources, optimal use of renewable and non-renewable resources, theory of non-market valuation and valuation methods of environmental costs and benefits, and the economics of sustainable development.

## Learning activities and teaching methods:

Independent reading of the textbook.

## Recommended optional programme components:

Intermediate studies in environmental economics.

## Recommended or required reading:

Hanley, N., Shogren, J.F., White, B.: Environmental Economics in Theory and Practice. 1996.

Availability of course books.

## Assessment methods and criteria:

Literature examination.

Grading:

1-5.

#### Person responsible:

Assistant Professor (acting) Erkki Mäntymaa.

## 721241A: Field Project, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

**ECTS Credits:** 

5 ects.

Language of instruction:

Free.
Timing:
Free.

## Learning outcomes:

To be agreed with professor.

Grading: 1-5.

## Person responsible:

The professor(s) of the major.

## 721342S: Game Theory, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Marja-Liisa Halko

Opintokohteen kielet: English

## **ECTS Credits:**

6 ects.

## Language of instruction:

Finnish.

## Timing:

Period D.

## Learning outcomes:

The aim of this course is both to familiarize students with the principles of game theory and shortly introduce some results of the behavioral game theory.

#### Contents:

Basic concepts of game theory, Games of perfect information (normal and extensive form games, Nash equilibrium, mixed strategy equilibrium), Games of imperfect information (Bayesian games).

## Learning activities and teaching methods:

Lectures, both pre-and post-lecture exercises.

## Recommended optional programme components:

Microeconomic analysis recommended.

## Recommended or required reading:

M. Osborne. An Introduction to Game Theory. Oxford University Press 2003.

Availability of course books.

## Assessment methods and criteria:

Lectures and literature examination.

#### **Grading:**

1-5.

## Person responsible:

Marja-Liisa Halko.

## 721313P: History of Economic Thought, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Junttila, Juha Pekka Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

## **ECTS Credits:**

5 ects.

#### Language of instruction:

Finnish. **Timina:** 

Periods A-B

## Learning outcomes:

To familiarize students with the history of economics and the ideas of the main economists.

#### **Contents:**

The development of economics since the ancient world.

## Learning activities and teaching methods:

Independent reading of the textbook.

## Recommended optional programme components:

Principles of Economics.

## Recommended or required reading:

R.E. Backhouse: The Penguin History of Economics. Penguin Books 2002.

Availability of course books.

## Assessment methods and criteria:

Literature examination

**Grading:** 

1-5.

## Person responsible:

Professor Mikko Puhakka.

## 721333S: Industrial Organization, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Maria Kopsakangas-Savolainen

Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

6 ects.

## Language of instruction:

Finnish or English.

**Timing:** Periods A-D.

## Learning outcomes:

To deepen the students' knowledge of imperfect competition and the use of game theory in analysing it. Students should be familiar with non-linear pricing and the affect of asymmetric information on the optimal agreements.

#### Contents:

Oligopolistic competition, role of market entrance, non-linear pricing and optimal agreements in situations of asymmetric information.

## Learning activities and teaching methods:

Independent reading of the textbooks.

## Recommended optional programme components:

Intermediate studies in economics.

## Recommended or required reading:

Shy, Oz: Industrial Organization. Theory and Applications. MIT Press. 1995; other literature announced later. Availability of course books.

## Assessment methods and criteria:

Literature examination.

Grading:

1-5.

## Person responsible:

Assistant Professor Maria Kopsakangas-Savolainen.

## 721215A: Intermediate Macroeconomics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Junttila, Juha Pekka

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

## **ECTS Credits:**

5 ects.

#### Language of instruction:

Finnish. **Timing:**Period C.

## Learning outcomes:

After completing the course students are familiar with aggregate economic phenomena, variables, and their measurement thoroughly. They are able to build up simple short- and medium term macroeconomic models based on modern approaches, enabling them to analyse for example the effects of economic policy actions on

various markets, both in closed and open economies. The students are also familiar with the shortcomings of the models in explaining the cycles in the aggregate economy, and are able to discuss and analyse the functioning of forecasting models for the overall economy before, during and after aggregate economic crises.

#### Contents:

Principles of macroeconomics; measurement systems of aggregate economy; functioning of goods, money and labour markets; principles of dynamic models; monetary and financial policies; international monetary economy; inflation and business cycles; IS-LM model; AS-AD-model; open economy extensions; especial focus on the US, Euro area and Japanese economies.

## Learning activities and teaching methods:

36 hours of lectures, 12 hours of exercises and independent reading of the textbooks and articles.

#### Recommended optional programme components:

Intermediate Microeconomics recommended.

## Recommended or required reading:

Blanchard, O.: Macroeconomics, 4. painos, Pearson/Prentice Hall, 2006; Burda, M. ja C. Wyplosz: Macroeconomics. A European Text. 4. painos. Oxford University Press 2005.

Availability of course books.

#### Assessment methods and criteria:

Final exam (lectures + exercises + books and other material.

## **Grading:**

1-5.

## Person responsible:

Professor Juha Junttila.

## 721216A: Intermediate Microeconomics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Puhakka Mikko Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

## **ECTS Credits:**

5 ects.

## Language of instruction:

Finnish. **Timing:**Period B.

## Learning outcomes:

The student should understand and be able to apply the basic concepts and analytical tools of modern microeconomic theory.

## **Contents:**

Basic concepts and applications of microeconomics.

## Learning activities and teaching methods:

30 hours of lectures, 12 hours of exercises and independent reading of the textbooks.

## Recommended optional programme components:

Principles of Economics.

## Recommended or required reading:

Varian, H.: Intermediate Microeconomics, A Modern Approach, 2007, 7th edition.

Availability of course books.

#### Assessment methods and criteria:

Lectures and exercises, final exam.

## **Grading:**

1-5.

#### Person responsible:

Professor Mikko Puhakka.

## 721317S: International Economics, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Vilmi Lauri Frans Olavi, Orjasniemi, Seppo Antero

Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

6 ects.

#### Language of instruction:

Finnish. **Timing:**Periods C-D.

### Learning outcomes:

To deepen the knowledge in functioning and development of international economy and the factors influencing them.

#### Contents:

International monetary theory and policy.

## Learning activities and teaching methods:

Independent reading of the textbooks.

#### Recommended optional programme components:

Principles of International Economics; Intermediate Macroeconomics.

## Recommended or required reading:

Kenen P. B.(2000): The International Economy, Cambridge University Press p. 273 - 610.

Availability of course books.

## Assessment methods and criteria:

Literature examination.

## **Grading:**

1-5.

## Person responsible:

Researcher Lauri Vilmi.

## 721242A: Labour Economics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Tapani Kovalainen Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

## **ECTS Credits:**

5 ects.

#### Language of instruction:

Finnish. **Timing:** 

Not lectured in 2009-2010.

## Learning outcomes:

The aim of the course is to familiarize the students with labour as a factor of production.

## **Contents:**

Demand and supply theories of labor in different markets. Especially the case of labor market in Finland.

#### Learning activities and teaching methods:

Independent reading of the textbooks

## Recommended or required reading:

Suomalainen työttömyys, toim. Pohjola, M., Taloustieto 1998. Borjas, G.: Labor Economics, McGraw#Hill, 1995. Euroopan rakenteelliset jäykkyydet, Valtioneuvoston kanslian julkaisusarja 2002/4.

#### Availability of course books.

#### Assessment methods and criteria:

Literature examination.

**Grading:** 

1-5.

## Person responsible:

Reseacher Tapani Kovalainen.

## 721310S: Macroeconomic Analysis, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Puhakka Mikko Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

6 ects.

#### Language of instruction:

Finnish. **Timing:**Period A-B.

## Learning outcomes:

After completing the course students have obtained the skills to apply high-level modern macroeconomic models in the analysis of aggregate economy. Compared to the intermediate level courses, based on a clearly more formal approach adopted in this course they are familiar with the most recent advances in the models for the short, medium and long-term analyses of the aggregate economy. They are also able to apply these models for empirical research. All the methods and approaches studied during the course are useful in other areas of economics, too. After being introduced to the ideas of critical evaluation of current modern macro models the students will have good abilities to conduct theoretical and/or empirical thesis work in the special area of macroeconomics.

#### Contents:

Macroeconomic models for the short-and medium run analysis (IS-LM and AS-AD-models); business cycles; unemployment and stabilisation policy; functioning of housing markets; growth theory based on the Solow model and its variations; long-term unemployment and structural economic policies.

## Learning activities and teaching methods:

40 hours of lectures, 18 hours of exercises and independent reading of the textbooks and articles given during the

## Recommended optional programme components:

Intermediate Micro- and Macroeconomics, Mathematical Economics, Basic Econometrics.

## Recommended or required reading:

Puhakka, M.: Lecture Notes on Two-Period Models in Macroeconomics, Helsingin yliopisto. Kansantaloustieteen laitoksen tutkimuksia, No. 78:1998 (latest version); Minford, P. & D. Peel: Advanced Macroeconomics: A Primer, Edward Elgar, 2002. Sorensen, P.B & H.J. Whitta-Jacobsen; Introducing Advanced Macroeconomics: Growth and Business Cycles, McGraw-Hill, 2005, Romer, D.: Advanced Macroeconomics, McGraw-Hill, the newest edition; other material given during the course.

Availability of course books.

## Assessment methods and criteria:

2 mid-term exams / 1 final exam (lectures +exercises + literature and other material).

#### **Grading:**

1-5.

## Person responsible:

Professor Juha Junttila.

## 721330S: Master's Thesis, Economics, 30 op

Opiskelumuoto: Advanced Studies

Laji: Diploma thesis

Vastuuyksikkö: Faculty of Economics and Business Administration

**Arvostelu:** A,B,N,C,M,EX,L **Opintokohteen kielet:** Finnish

#### **ECTS Credits:**

30 ects.

## Language of instruction:

Finnish. **Timing:**Periods: A-D.

## Learning outcomes:

The aim is to write a thesis which shows the student's ability to apply the tools and methods of economics to solve, and shed light on, a research problem. Seminar presentations will also develop student's ability to communicate the results of his/her written work to an audience.

#### Contents:

During seminars student will prepare two presentations on his/her chosen topic. The first presentation covers the subject matter of the thesis and presents the preliminary contents of the thesis. The second (and the main) presentation concentrates on the research results obtained in the thesis.

## Learning activities and teaching methods:

Seminars.

## Recommended optional programme components:

A good knowledge of Economics, its tools and methods at the S (master) level.

## Recommended or required reading:

No specific textbook. Occasionally some assigned readings.

## Assessment methods and criteria:

Seminars. **Grading:** 

Approbatur - Laudatur. **Person responsible:**Professors of economics

## 721220A: Mathematical Economics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Matti Koivuranta, Marko Korhonen

Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

## Language of instruction:

Finnish. **Timing:**Period A.

## Learning outcomes:

After the course student can use the mathematical tools needed in intermediate and advanced economic studies.

## **Contents:**

Equilibrium analysis, comparative statistics, optimization and dynamic models.

## Learning activities and teaching methods:

30 hours of lectures, 20 hours of exercises and independent reading of the textbooks.

#### Recommended optional programme components:

Basic courses of mathematics.

## Recommended or required reading:

Chiang A.C: Fundamental Methods of Mathematical Economics, 2005.

Availability of course books.

#### Assessment methods and criteria:

Lectures and exercises, literature examination

## **Grading:**

1-5.

## Person responsible:

Researcher Matti Koivuranta.

## 721320S: Microeconomic Analysis, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Puhakka Mikko Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

6 ects.

#### Language of instruction:

Finnish.

Timing:

Periods C-D.

## Learning outcomes:

The student should learn rigorously the basic concepts and analytical tools of modern microeconomic theory. Furthermore she should be able to apply those tools in her thesis work.

#### Contents:

Microeconomic theory and applications.

## Learning activities and teaching methods:

48 hours of lectures, 24 hours of exercises and independent reading of the textbook.

## Recommended optional programme components:

Intermediate microeconomics, mathematical economics.

## Recommended or required reading:

Cowell, F. (2006): Microeconomics. Principles and Analysis and other material delivered in class.

## Assessment methods and criteria:

Lectures and literature examination.

## **Grading:**

1-5.

## Person responsible:

Professor Mikko Puhakka.

## 721210P: Principles of Economics, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Maria Kopsakangas-Savolainen

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay721210P Economics for Business (OPEN UNI) 5.0 op

Voidaan suorittaa useasti: Kyllä

## ECTS Credits:

5 ects.

## Language of instruction:

Finnish.

## Timing:

Period A.

#### Learning outcomes:

On completion this course students should be able to apply economic way of thinking in order to understand microeconomic problems such as why markets allocate resources where they are most wanted, why prices and wages fall or rise, how firms arrive at production decision and how consumers make their consumption choices. Students should also understand the principles of labour and capital markets and be able to analyse simple macroeconomics models.

#### Contents:

Market mechanism: price formation, importance of prices in directing the economic resources, role of consumers, firms and public authority in market economy.

## Learning activities and teaching methods:

32 hours of lectures, 15 hours of exercises and independent reading of the textbooks.

#### Recommended or required reading:

Begg, David et al.: Economics, 9. ed, London 2005 and other material announced during the lectures. Availability of course books.

#### Assessment methods and criteria:

Lectures and a literature examination

#### **Grading:**

1-5.

## Person responsible:

Assistant professor Maria Kopsakangas-Savolainen.

## 721236P: Principles of Environmental Economics, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Mäntymaa, Erkki Paavo Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

## **ECTS Credits:**

5 ects.

## Language of instruction:

Finnish.

\*The course can be passed with a literature examination in English. The students wishing to do that should contact the teacher.

## Timing:

Period C.

## Learning outcomes:

Students know and are able to verbally and graphically present the most crucial principles and themes of environmental and resource economics.

## **Contents:**

Optimal harvesting models of renewable and non-renewable natural resources, contradiction between economic growth and resource scarcity, policy instruments for controlling pollution abatement, and valuation methodology concerning non-market resources and environmental amenities.

#### Learning activities and teaching methods:

30 hours of lectures and independent reading of the textbooks

## Recommended or required reading:

Tietenberg, T: Environmental Economics and Policy, 4th ed., 2004. Paavola, J.: Ympäristötalouden perusteet, 1996.

Availability of course books.

## Assessment methods and criteria:

Lectures and literature examination

## Grading:

1-5.

## Person responsible:

Assistant professor (acting) Erkki Mäntymaa.

## 721218P: Principles of International Economics, 5 op

Voimassaolo: - 31.07.2010 Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Vilmi Lauri Frans Olavi Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

#### Language of instruction:

Finnish. **Timing:**Period: C.

#### Learning outcomes:

The aim of this course is to introduce the functioning and development of international economy and the factors influencing to them.

### **Contents:**

International trade theories and politics.

## Learning activities and teaching methods:

30 hours of lectures, 12 hours of exercises and independent reading of the textbooks.

#### Recommended optional programme components:

Principles of Economics.

## Recommended or required reading:

Krugman, P.R. & Obstfeld, M. (2000): International Economics, Theory and Policy, 5. ed, Addison-Wesley.; other material announced during the lectures.

Availability of course books.

## Assessment methods and criteria:

Literature examination in academic year 2009-2010.

## **Grading:**

1-5.

#### Person responsible:

Researcher Lauri Vilmi.

## 721217P: Public Sector Economics, 5 op

Voimassaolo: 01.08.2003 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Mäntymaa, Erkki Paavo Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

## Language of instruction:

Finnish.

\*The course can be passed with a literature examination in English. The students wishing to do that should contact the teacher.

## Timing:

Periods B.

## Learning outcomes:

Students know and are able to verbally and graphically present the most crucial principles and themes of the function and economic analysis of public sector mostly from micro theoretical point of view.

#### Contents:

Market efficiency and failure, efficiency and equity, public goods, theory of public choice, public production and bureaucracy, externalities, tax incidence, taxation and efficiency, optimal taxation, and taxation of capital.

## Learning activities and teaching methods:

30 hours of lectures and independent reading of the textbooks.

## Recommended or required reading:

Stiglitz, J: Economics of the Public Sector, 2000, 3rd ed. chapters 3-9 and 17-20; Tuomala, M.: Julkistalous, 1997 chapters 1-7, 9-10 and 14.

Availability of course books.

#### Assessment methods and criteria:

Lectures and literature examination.

## **Grading:**

1-5.

## Person responsible:

Assistant professor (acting) Erkki Mäntymaa.

## 721230A: Seminar in Economics, 10 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Junttila, Juha Pekka Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

10 ects.

## Language of instruction:

Finnish. **Timing:** 

Periods A-D.

#### Learning outcomes:

The aim of this course is to provide an opportunity to practice independent and goal conscious research. During seminars each student will write and present a research paper on chosen economics topic in order to practice research and presentation skills.

#### Contents:

Research skills, choosing a topic for research, writing a report, presenting and defending one's own report, evaluating and acting as an opponent to fellow researchers.

## Learning activities and teaching methods:

Writing and presenting two seminar papers.

## Recommended or required reading:

Material selected by the lecturer.

#### Assessment methods and criteria:

Active participation in seminars. Keeping the schedule in working assignments. Evaluating and acting as an opponent to fellow researchers.

## **Grading:**

1-5.

## Person responsible:

Assistant Professor and Lecturer in Economics.

## 721336S: Special Issue, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

**ECTS Credits:** 

6 ects.

Language of instruction:

Free. Timing: Free.

#### Learning outcomes:

Upon completion of this course, the student has familiarized with a chosen topic which is not profoundly discussed during other courses. The student knows profoundly the elements of the related literature, what kind of research there is related to this subject and what themes there are still uncovered. The student can apply these concepts and theories and with the help of them to analyze different phenomena in the student's own research and also in business life in general.

## Assessment methods and criteria:

For example 24 h lectures and a literature examination or an extended essay or a practical exercise. The topic of the lecture courses varies. Also courses taken in some other Finnish or foreign universities can be accepted as a completion of the course. Credits depend on the extent of the course

#### Person responsible:

Professors.

## 721115P: Theory of Money, Banking and Monetary Policy, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail Opettajat: Junttila, Juha Pekka Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

## Language of instruction:

English if necessary, otherwise Finnish.

**Timing:** Periods D.

## Learning outcomes:

After completing the course students understand the functioning of banking firms and markets where banks operate with customers, other banks, and the central bank. They are familiar with the objectives, tools and mechanism of monetary policy, and especially its effects on money markets and the real economy. After the course the students are able to understand the practical statements about the monetary policy issues and functioning of markets for money and interest yielding assets given in the public media and are able to analyze these issues with the theoretical tools given in the course.

#### Contents:

Financial systems; the concepts of money and finance; determination of interest rates; monetary and financial institutions; supervision of banking; central banks; tools, aims and mechanisms of monetary polity; financial systems of euro zone and the monetary policy of Federal Reserve and ECB; the connection between monetary policy and aggregate demand and supply.

#### Learning activities and teaching methods:

30 hours lectures (in English if necessary), and independent reading of the textbooks and other material distributed during the course.

## Recommended or required reading:

Mishkin, F.S.: The Economics of Money, Banking and Financial Markets, 7th or 8th edition, Pearson-Addison Wesley, 2004 or 2007; Howells, P. & K. Bain; The Economics of Money, Banking and Finance: A European Text, 3rd ed, Prentice Hall, 2005, other material possibly announced during the lectures.

Availability of course books.

#### Assessment methods and criteria:

Final exam (lectures + books + articles.

**Grading:** 

1-5.

## Person responsible:

Professor Juha Junttila.

## 721237P: Urban and Regional Economics and Policy, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail
Opettajat: Jaakko Simonen
Opintokohteen kielet: Finnish

Leikkaavuudet:

ay721237P Urban and Regional Economics and Policy (OPEN UNI) 5.0 op

Voidaan suorittaa useasti: Kyllä

#### **ECTS Credits:**

5 ects.

#### Language of instruction:

Finnish. **Timing:** 

Period C.

## Learning outcomes:

The aim of the course is to familiarize students with understanding and analyzing the decisions made in micro level and their effects of to the macro level phenomena in cities and regions. Students will come to understand the broad range of relationships between economics and geography.

#### Contents:

Essential features of classical models of location, growth theories and theoretical 'New Economics Geography' research. Agglomeration of economic activity and polarization of regional growth. Analysis of some essential features of spatial labour markets and interregional immigration flows. Regional output-input analysis. The nature of urban and regional economic policy.

## Learning activities and teaching methods:

10 hours of introductory lectures and independent studying.

## Recommended optional programme components:

Principles of Economics.

## Recommended or required reading:

McCann, P.: Urban and Regional Economics. New York: Oxford University Press.2001; Armstrong, H. & Taylor, J.: Regional Economics and Policy, 3rd ed. Oxford: Blackwell. 2000. (to the appropriate extent). Availability of course books.

## Assessment methods and criteria:

Exam.

## **Grading:**

1-5.

#### Person responsible:

D.Sc. Jaakko Simonen.