Opasraportti

Oulu Business School - Master of Science (MSc), Economics 2014-2015 (2014 - 2015)

Master's programme in **Economics** offers students a strong theoretical and methodological knowledge in Economics. The learning process in economics is based on a cumulative increase of understanding about the economic processes. Exercises and writing of term papers are included in lecture series. Reading of scientific international journals is an essential part of the studies. Job markets for economists are typically broad including specialist and executive positions both on private and public sector. A student who receives the master degree in economics is allowed to use the title economist. Social and economic changes in the operating environment will open all the time new missions for economists. Contents of the teaching are continuously updated based on the changes in the operating environment.

After completing the Master of Science in Economics, the student

- · can choose and apply economic theories
- can use and evaluate the newest scientific research and scientific tendencies in their own work
- can use necessary quantitative methods in independent research
- recognizes the traditional and new approaches in economics and can interpret their empirical applications
- can interpret the economic processes and causes and effects of economic relationships and compare the characteristics and applicability of economic models in different situation
- can write about and discuss economic phenomena applying economic thinking
- is able to do independent research work and write and present research reports showing expertise in some field of economics

Course Structure Diagram in 2014-2015

MSc (Econ. & Bus. Adm.) in Economics

Degree structure

Module 1: Economic Theory

721345S Intermediate Microeconomics	6
721346S Intermediate Macroeconomics	6
721320S Economic Theory I	6
721310S Economic Theory II	6
721342S Game Theory	6

Module 2: Fields

Five courses of the following:

721333S Industrial Organization	6
721334S Environmental Economics	6
721344S Urban and Regional Economics	6
721317S International Economics	6
721962S International Finance	6
721128S Corporate Governance	6
721065S Internship	6

Module 3: Methods and Applications

721338S Mathematical Economics	6
721335S Principles of Econometrics	6
721954S Financial Econometrics	6
721961S Entrepreneurial Finance	6
721070S Globally Responsible Business	s 6

Module 4: Master's thesis

721330S Master's Thesis in Economics 30

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja jaksot

721320S: Economic Theory I, 6 op
721310S: Economic Theory II, 6 op
721334S: Environmental Economics, 6 op
721342S: Game Theory, 6 op
721070S: Globally Responsible Business, 6 op
721333S: Industrial Organization, 6 op
721346S: Intermediate Macroeconomics, 6 op
721345S: Intermediate Microeconomics, 6 op
721330S: Master's Thesis in Economics, 30 op
721338S: Mathematical Economics, 6 op
721066S: Principles of Econometrics, 6 op
721344S: Urban and Regional Economics, 6 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

721320S: Economic Theory I, 6 op

Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Svento, Rauli Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

ECTS Credits: 6 credits / 160 hours of work

Language of instruction: English Timing: Period 1C

Learning outcomes:

The student should learn rigorously the basic concepts and analytical tools of modern microeconomic theory. He /she should be able to apply those tools in the thesis work. Upon completing the required coursework the student is able to formulate and solve objective based optimization problems of households and firms. The student masters and knows how to interpret the general equilibrium results. The student is able to judge and interpret the role of uncertainty in decision making. He/she knows the basic theorems of welfare economics. The student is able to formulate and interpret the basic models of strategic behavior.

Contents:

Constrained optimization problems of economic agents, market analysis, general equilibrium analysis, welfare economics, decision making under uncertainty, information economics.

Mode of delivery:

Face-to-face teaching.

Learning activities and teaching methods:

36 hours of lectures, 18 hours of exercises.

Target group:

The first year Master's students

Prerequisites and co-requisites:

Intermediate micro and macroeconomics, mathematical economics.

Recommended or required reading:

Cowell, F. (2006): Microeconomics. Principles and Analysis; Gravelle, H. & Rees, R. (2004): Microeconomics, and required readings from a list of readings for the course. Active following of current topics e.g. from the Economist or Financial Times.

Assessment methods and criteria:

Written exam and a short term paper

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. **Person responsible:** Professor Rauli Svento **Other information:**

The number of students is limited.

721310S: Economic Theory II, 6 op

Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Puhakka Mikko Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 credits / 160 hours of work Language of instruction: English Timing: Period 2B. Learning outcomes: Student is able to apply dynamic models in the analysis of aggregate economy. He/she can also use these models in empirical analyses, and is well prepared to write a Master's thesis. Contents: Two-period models, introduction to dynamic programming, theory of economic growth, new keynesian macro,

fiscal policy, search theory. **Mode of delivery:**

Face-to-face teaching.

Learning activities and teaching methods:

36 lectures and 18 hours of exercises.

Target group:
The second year Master's students.
Prerequisites and co-requisites:
Intermediate micro and macroeconomics, mathematical economics, and preferably Economic Theory I.
Recommended optional programme components:
Active following of current topics e.g. from the Economist or Financial Times.
Recommended or required reading:
P. Minford and D. Peel, Advanced Macroeconomics. Edvard Elgar 2002. M. Puhakka, "Lecture Notes on Two-
Period Models in Macroeconomics" (2005), and required readings from a list of readings for the course.
Assessment methods and criteria:
Written exam and a short term paper.
Grading:
The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.
Person responsible:
Professor Mikko Puhakka
Other information:
The number of students is limited.

721334S: Environmental Economics, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Juutinen, Artti Markus Tapani

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 credits / 160 hours of work. Language of instruction: English Timing: Period 1D Learning outcomes:

Student is able to graphically and mathematically describe the socially optimal level of pollution and define the efficiency conditions of the crucial policy instruments of pollution control. He/she can apply the most important methods for monetary valuation of environmental benefits and empirically examine the demand of environmental commodities. In addition, student is able to formally present the models describing optimal use of natural resources and apply these models in practical decision making.

Contents:

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, and forest rotation models.

Learning activities and teaching methods:

Independent reading of study materials.

Target group:

First year Master's students.

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading:

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

Assessment methods and criteria: Literature exam. Grading: The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. Person responsible: Professor Artti Juutinen Working life cooperation: No Other information:

721342S: Game Theory, 6 op

Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Marja-Liisa Halko Opintokohteen kielet: English

ECTS Credits: 6 credits /160 hours of work Language of instruction: English Timing: Period 1D. Learning outcomes: Student learns the basics of theory of games so widely used in all fields of modern economics. **Contents:** Forms of strategic games, dominating strategies, Nash equilibrium, mixed strategies, the extensive form of a game, sub-game perfect games, sequential games and limited information games. Mode of delivery: Face-to-face teaching. Learning activities and teaching methods: 36 hours of lectures, 18 hours of exercises. Target group: First year Master's students. Prerequisites and co-requisites: Economic Theory I Recommended optional programme components: **Recommended or required reading:** Assessment methods and criteria: Written exam. Grading: The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. Person responsible: Dr. Marja-Liisa Halko Working life cooperation: Other information:

The number of students is limited.

721070S: Globally Responsible Business, 6 op

Voimassaolo: 01.08.2014 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Jan Hermes Opintokohteen kielet: English Leikkaavuudet: ay721070S Globally Responsible Business (OPEN UNI) 6.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

721333S: Industrial Organization, 6 op

Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Maria Kopsakangas-Savolainen Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 credits/160 hours of work Language of instruction: English Timing:

Period 2A the course will be lectured in academic year 2015-2016.

Learning outcomes:

Upon successful completion of this course, student is 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. He/she should be able to understand the market conditions where regulation is needed and analyze different form of regulation methods. He/she should be also able to use game theory in analyzing firms' strategic decisions and be able to intelligently speculate the motives of real world pricing and other decisions of the firms. Student understands the effect of asymmetric information on the optimal agreements.

Contents:

Functioning of imperfect competition, monopoly, cartel, price discrimination, non-linear pricing, product differentiation, principles of game theory, strategic behavior, role of market entrance, innovations and research and development, optimal agreements in situations of asymmetric information.

Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods:

24 hours of lectures, home assignments (including problem sets and essay).

Target group:

Second year Master's students

Prerequisites and co-requisites:

Intermediated Microeconomics, Mathematical economics

Recommended optional programme components:

Recommended or required reading:

Cabral, L.M.B. Introduction to Industrial Organization. MIT Press. 2000; Shy, Oz: Industrial Organization. Theory and Applications. MIT Press. 1995; Kopsakangas-Savolainen and Svento, Modern Energy Markets. Springer 2012; other literature announced later.

Assessment methods and criteria:

Home assignments, written examination.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Maria Kopsakangas-Savolainen **Other information:**

6

721346S: Intermediate Macroeconomics, 6 op

Voimassaolo: 01.08.2014 -**Opiskelumuoto:** Advanced Studies Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Puhakka Mikko

Opintokohteen kielet: English

Leikkaavuudet:

721215A Intermediate Macroeconomics 5.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits: 6 credits / 160 hours of work Language of instruction: English Timing: Period 1B. Learning outcomes:

After completing the course the student is familiar with aggregate economic phenomena and their thorough measurement. He/she is able to use simple macroeconomic models to understand economic issues such as growth and business cycles. The student is also able to analyze the effects of different economic policies with simple economic models.

Contents:

The course covers national income accounting, economic growth, business cycles, determinants of inflation and unemployment and basic concepts of open economy macroeconomics. Additional topics include the effects of monetary and fiscal policy.

Mode of delivery:

Face-to-face teaching. Learning activities and teaching methods: 36 lectures and 18 hours of exercises. Target group: First year Master's students. **Recommended or required reading:** Williamson, Stephen D.D.: Macroeconomics, 4 th ed., Pearson/Prentice Hall 2011 Assessment methods and criteria: Written exam. Grading: The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. Person responsible: Professor Mikko Puhakka, Doctoral student Matti Koivuranta. Working life cooperation: No. Other information:

The number of students is limited.

721345S: Intermediate Microeconomics, 6 op

Voimassaolo: 01.08.2014 -**Opiskelumuoto:** Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Huuki Hannu

Opintokohteen kielet: English

Leikkaavuudet:

721216A Intermediate Microeconomics 5.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 credits / 160 hours of work Language of instruction: English Timing: Period 1A Learning outcomes:

Upon complementing the course, the student will be able to explain the main features of consumer and firm behavior. The student recognizes different market environments and their effect on optimal decision making. In addition to this, the student will be able to use the concept of social welfare.

Contents:

The basic concepts of consumer and firm theory, market equilibrium, uncertainty and risk, intertemporal choice. **Mode of delivery:**

Face-to-face teaching.

Learning activities and teaching methods:

36 lectures and 18 hours of exercises.

Target group:

The first year Master's students

Recommended or required reading:

Varian, H.: Intermediate Microeconomics, A Modern Approach, 8th (or older) edition and other material delivered in class.

Assessment methods and criteria:

Written exam.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Rauli Svento, Doctoral student Hannu Huuki

Working life cooperation:

No.

Other information:

The number of students is limited.

721317S: International Economics, 6 op

Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Marko Korhonen Opintokohteen kielet: English Voidaan suorittaa useasti: Kyllä

ECTS Credits: 6 credits / 160 hours of work Language of instruction: English Timing: Period 1C. Learning outcomes: Student is familiar with topics in international macroeconomics as well as to theories trying to account for the basic stylized facts in the field. Contents: Advanced theoretical and empirical analysis of contemporary international macroeconomic policy issues in both industrialized and developing economies. The topics covered include current account balance, dynamics of small open economy, real exchange rate and the terms of trade, uncertainty and international financial markets. **Mode of delivery:**

Face-to-face teaching.

Learning activities and teaching methods: 12 hours of lectures, 12 hours of student presentations, exercises 8h, self-study.

Target group: First year Master's students. Prerequisites and co-requisites: Economic Theory I and Principles of Econometrics.

Recommended optional programme components:

Recommended or required reading:

Obstfeld and Rogoff (1996): Foundations of International Macroeconomics, Reinhart and Rogoff (2009): This time is different.

Assessment methods and criteria: Written exam and student presentations Grading: The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. Person responsible: University lecturer Marko Korhonen Working life cooperation: No Other information: The number of students is limited.

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

Opiskelumuoto: Advanced Studies Laji: Diploma thesis Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail 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:

Students prepare two presentations on his/her chosen topic and acts as an opponent to a presentation by a fellow student. 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. Students are expected to be active participants in seminars.

Mode of delivery:

Face-to-face teaching.

Learning activities and teaching methods:

Seminars, the written Master's thesis, maturity exam.

Target group:

Students with a major in Economics

Prerequisites and co-requisites:

721320S Microeconomic analysis and 721310S Macroeconomic Analysis is recommended. **Recommended optional programme components:**

Recommended or required reading:

Thompson, W. (2001): A Guide for the Young Economist. The book is mainly written for the doctoral students, but it contains useful material also for students writing their Master's theses.

Assessment methods and criteria: Seminars, independent writing of dissertation. Read more about assessment criteria at the University of Oulu webpage. Grading: 1-5. Person responsible: The Professors of Economics. Working life cooperation:

Other information:

The number of students is limited.

721338S: Mathematical Economics, 6 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opettajat: Matti Koivuranta

Opintokohteen kielet: English

Leikkaavuudet:

721220A Mathematical Economics 5.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 credits / 160 hours of work. Language of instruction: English. Timing: Period 1A. Learning outcomes: Upon completion of the course, the student will be able to apply mathematical methods needed in the courses in the Economic Theory module. Contents:

The course introduces frequently used mathematical methods in the economic literature. Applicable parts from linear algebra, differential and integral calculus, mathematical optimization and dynamic analysis are covered. Mode of delivery:

Face-to-face teaching.

Learning activities and teaching methods:

36 hours of lectures, 18 hours of exercises.

Target group:

First year Master's students in Economics and Finance.

Recommended or required reading:

Chiang A.C: Fundamental Methods of Mathematical Economics, 4th edition, McGraw-Hill. New York, NY, 2005. Assessment methods and criteria:

Written exam. Mandatory exercises.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Mikko Puhakka, Doctoral student Matti Koivuranta.

Working life cooperation:

No.

Other information:

The number of students is limited.

721066S: Principles of Econometrics, 6 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Sanna Huikari

Opintokohteen kielet: English

Leikkaavuudet:

721060A Introduction to Econometrics 5.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 credits / 160 hours of work Language of instruction: English Timing: Period 1B. Learning outcomes:

After completing the course the student is familiar with theoretical background of the standard methods used in empirical analyses and with regression analysis relevant for analyzing economic data. In addition, the student can interpret and evaluate the outcomes of empirical analysis. Furthermore, he/she has basic knowledge of using EViews software in econometric analyses.

Contents:

Statistical basics of econometrics, and especially the use of basic econometric models in the analysis of different economic phenomena. In addition to regression models adapted to cross-section data, the course familiarizes students with basic features of time series analysis. The main focus is on dealing with the basic concepts of econometrics and familiarizing with the use of EViews software.

Mode of delivery:

Face-to-face teaching.

Learning activities and teaching methods:

36 hours of lectures, 18 hours of exercises, exam 4 hours, preparing for the lectures, exercises and exam 102 hours.

Target group:

First year Master's students in Economics, Accounting and Finance.

Prerequisites and co-requisites:

It is highly recommended that the student has already passed the course 806116P Basic Methods in Statistics 1 (in Finnish: 806116P Tilastotiedettä kauppatieteilijöille, previously: 806109P Tilastotieteen perusmenetelmät 1) or has elementary knowledge of statistics and probability theory.

Recommended optional programme components:

Recommended or required reading:

Stock James H., Watson Mark W.: Introduction to Econometrics, 2. or 3. edition. Other material announced during the lectures.

Assessment methods and criteria:

Written exam.

Grading:

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Professor Rauli Svento, Doctoral student Sanna Huikari

Working life cooperation:

No

Other information:

The number of students is limited.

721344S: Urban and Regional Economics, 6 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Jaakko Simonen

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 credits / 160 hours of work Language of instruction:

English

Timing:

Period 2A. The course will be lectured in academic year 2015-2016.

Learning outcomes:

The student is familiar with analyzing the decisions made in micro level and their effects of to the macro level phenomena in cities and regions. He/she will understand the broad range of relationships between economics and geography.

Contents:

Essential features of classical models of location and growth theories. Agglomeration of economic activity and technology diffusion. Analysis of some essential features of spatial labor markets and interregional immigration flows. Regional input-output analysis. Current topics of urban and regional economic policy.

Mode of delivery:

Face-to-face teaching.

Learning activities and teaching methods:

24 hours of lectures, 12 hours for writing and presentation of news analysis and for exercises.

Target group:

Second year master's students.

Recommended or required reading:

McCann, P.: Urban and Regional Economics. New York: Oxford University Press.2001 or 2013; Armstrong, H. & Taylor, J.: Regional Economics and Policy, 3 rd ed. Oxford: Blackwell. 2000. Other material to be shared on lectures.

Assessment methods and criteria:

Written exam, news analysis and its presentation, voluntary home essay as part of the literature examination. **Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:

Senior research fellow Jaakko Simonen

Working life cooperation:

No

Other information:

The number of students is limited.