Opasraportti

TaTK - Finance 2012-2013 (2012 - 2013)

The degree programme in Economics has two tracks (majors): Economics and Finance. The degree programme provides students with a strong theoretical and methodological knowledge, with a focus on the intersection of theory and practice. The approach in both majors is analytical and quantitatively oriented. Upon graduation, the students will have the necessary skills required to work in demanding specialist and executive positions in corporations, governmental agencies and third sector organizations.

Financial economics, or simply finance, is a branch of economics that applies the techniques of economic analysis and quantitative methods (statistics and econometrics) to understand the savings and investment decisions by individuals, the investment, financing and payout decisions by firms, the level and properties of interest rates and prices of financial assets and derivatives, and the economic role of financial intermediaries.

The traditional taxonomy of finance is (1) corporate finance and (2) financial markets and asset pricing. Corporate finance is concerned with how businesses work, in particular, how they allocate capital (traditionally, "the capital budgeting decision") and how they obtain capital ("the financing decision"). A central theme in financial markets and asset pricing is the pursuit of an understanding of how the prices of financial securities are determined in financial markets. Behavioral finance is a new, controversial field, which seeks to show that psychological biases of individuals affect the pricing of securities.

Contents:

Basic studies: Students will become familiar with the principles of capital budgeting and financial planning; understand the theoretical foundations of financial decisions of corporations; become familiar with the theoretical principles of equity pricing and the modern portfolio theory; learn how to calculate asset returns and basic risk measures; become familiar with the nature of financial risks and understand the basics of financial risk management; and become familiar with the basics of SAS programming.

Intermediate studies: Students will enhance their knowledge and skills in corporate finance and asset pricing; become familiar with conducting academic research in finance, empirical analysis of financial data and the principles and use of derivatives securities; and learn the principles of behavioral finance.

Advanced studies: Students will learn how to apply basic quantitative methods to empirical problems in asset pricing and portfolio theory; and understand the important features of time series of market prices; appreciate the relevance of efficient market theory to predicting prices; become familiar with appropriate methods in forecasting return volatility; acquire experience of applying computational methods to market data using the free R language; and become informed about the broad range of econometrics methods that are applied in finance research.

Degree structure

Basic studies (ECTS):

721362P Introduction to Financial Economics	5
721178P Investointi- ja rahoitussuunnittelu (Fundamentals of Corporate Finance)	5
721361P Sijoittajan investointiteoria (Investments)	5
721174P Financial Risk Management	5

In addition, at least 5 ECTS worth of the following:

721363P	Introduction to Market Analysis	5
721364P	Introduction to Empirical Finance	5

Intermediate studies:

721924A	Seminar in Finance	10
721198A	Derivative Securities	5
721370A	Fixed Income Securities	5
721199A	Equity Markets	5
721922A	Theory of Corporate Finance	5

In addition, at least 5 ECTS worth of the following:

721371A	Entrepreurial Finance	5
721170A	Financial Analysis and Firm Valuation	5
721009A	Additional Studies in Finance	5
721241A	Harjoittelu (Internship)	5

Advanced studies:

721950S	Master's Thesis in Finance	30
721952A	Portfolio Management	6
721951S	Portfolio Performance Analysis	6
721954S	Financial Econometrics	6
721383S	Asset Pricing	6

In addition, at least 6 ECTS worth of the following:

721956S	Alternative Investments	6
721190S	Advanced Firm Valuation	6
721317S	Kansainvälinen talous (International Economics)	6
721189S	Advanced Financial Analysis	6
721310S	Makrotaloudellinen analyysi (Macroeconomic Analysis)	6
721320S	Mikrotaloudellinen analyysi (Microeconomic Analysis)	6
721955S	Special Issue	6

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

721009A: Additional Courses in Finance, Intermediate Level, 0 op
721956S: Alternative Investments, 6 op
721383S: Asset Pricing, 6 op
721198A: Derivative Securities, 5 op
721371A: Entrepreneurial Finance, 5 op
721199A: Equity Markets, 5 op
721954S: Financial Econometrics, 6 op

721174P: Financial Risk Management, 5 op
721370A: Fixed Income Securities, 5 op
721178P: Fundamentals of Corporate Finance, 5 op
721060A: Introduction to Econometrics, 5 op
721364P: Introduction to Empirical Finance, 5 op
721362P: Introduction to Financial Economics, 5 op
721363P: Introduction to Market Analysis, 5 op
721361P: Investments, 5 op
721950S: Master's Thesis, Finance, 30 op
721952S: Portfolio Management, 6 op
721951S: Portfolio Performance Analysis, 6 op
721924A: Seminar in Finance, 10 op
721955S: Special Issue in Finance, 6 op
721922A: Theory of Corporate Finance, 5 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

721009A: Additional Courses in Finance, Intermediate Level, 0 op

Voimassaolo: 01.08.2003 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Oulu Business School
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 finance.
Grading:
1-5.
Person responsible:
Professor in Finance.

721956S: Alternative Investments, 6 op

Voimassaolo: 01.08.2010 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuyksikkö: Oulu Business School
Arvostelu: 1 - 5, pass, fail
Opettajat: Hannu Kahra

Opintokohteen kielet: English

ECTS Credits:
6 ECTS credits / 160 hours of work.
Language of instruction:
English.

Timing:
Period C.

Learning outcomes:
Alternative investments are assets considered outside of the traditional asset classes of stocks, bonds and cash. The students will learn that due to their special characteristics, alternative assets tend to have low correlations with traditional asset classes, providing additional portfolio diversification and potential for higher returns.
Contents:
The course aims to give an introduction to investing in (1) real estate, (2) private equity and venture capital, (3) hedge funds, and (4) commodities, currencies and volatility.

Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures and assignments 40h, self-study 116h, exam 4h.

Target group:
Students majoring in finance.
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
Material provided by the instructors.
Assessment methods and criteria:
Students complete the course in the faculty examination. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.

Person responsible:
Professor Hannu Kahra.

Working life cooperation:
-
Other information:
The number of students is limited.

721383S: Asset Pricing, 6 op

Voimassaolo: 01.08.2008 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Juha Joenväärä

Opintokohteen kielet: English

ECTS Credits:
6 ECTS credits / 160 hours of work.
Language of instruction:
English.

Timing:
Period D.

Learning outcomes:
The students will become familiar with modern asset pricing theory and econometric methods in applying theoretical models in empirical research. After the course the student is able to use basic asset pricing models across different asset classes and implement asset pricing models in practice. Specifically, the students can explain the basic theoretical concepts of asset pricing and solve a basic general equilibrium model that prices the assets. The students can also use basic empirical asset pricing techniques and tests including time-series regressions and cross-sectional regressions as well as the Ross, Gibbons, and Shanken test.
Contents:
The pricing of all assets is based on a single idea: price equals expected discounted payoff that captures the macroeconomic risks underlying each security's value. Traditional asset pricing models (CAPM, ICAPM, APT) are embedded in the stochastic discount factor (SDF) framework. One of the key issues is that there is a relation between discount factors, betas and mean-variance frontiers: they are equivalent concepts. A wide variety of popular methods, including time-series and cross-sectional regressions are presented and applied to empirical data.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures and exercises 40h, self-study 116h, exam 4h. SAS and R, an open-source computing package, are applied in the course.
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
Cochrane: Asset Pricing (2 nd edition), Oxford University Press; Ilmanen: Expected Returns: An Investor's Guide to Harvesting Market Rewards, Wiley
Check availability from here.
Assessment methods and criteria:
Assessment methods include assignments and exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.

Person responsible:
Professor Hannu Kahra.
Working life cooperation:
-
Other information:
The number of students is limited.

721198A: Derivative Securities, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Perttunen, Jukka Olavi

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period D.

Learning outcomes:
Upon completion the student should be able to value different types of derivative securities and to manage the risk involved with them.
Contents:
Risk-neutral valuation principle, analytical and numerical valuation methods, the hedging of derivative securities, volatility estimation.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures 36h, self-study 93h, exam 4h.
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:
The recommended prerequisite is the completion of 721174P Financial Risk Management.
Recommended optional programme components:
-
Recommended or required reading:
Hull: Options, Futures & Other Derivatives, Pearson, 6th edition.
Check availability from here.
Assessment methods and criteria:
There are two intermediate exams during the course. Each of the intermediate exams can be used to replace one of the five problems in the final exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.
Person responsible:
Professor Jukka Perttunen.
Working life cooperation:
-
Other information:
The number of students is limited.

721371A: Entrepreneurial Finance, 5 op

Voimassaolo: 01.08.2010 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

ECTS Credits:
5 ECTS credits / 133 hours of work.

Language of instruction:
English.

Timing:
To be specified later.
Learning outcomes:
Understand the broader issues of investing in entrepreneurial ventures, understand the more detailed issues of how to evaluate and finance entrepreneurial investments, and study interaction of finance and strategy. Ultimately the goal is to give some of the tools needed to start a company and finance it, be a venture capitalist or private equity partner and invest in private equity partnership.

Contents:
This course examines the elements of entrepreneurial finance, focusing on technology-based start-up ventures, and the early stages of company development. It addresses key questions which challenge all entrepreneurs: how much money can and should be raised; when should it be raised and from whom; what is a reasonable valuation of the company; and how funding should be structured. The subject aims to prepare students for these decisions, both as entrepreneurs and venture capitalists.

Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
To be specified later.
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
To be specified later.
Assessment methods and criteria:
To be specified later.
Grading:
1-5.

Person responsible:
N.N.

Working life cooperation:
-
Other information:
The number of students is limited.

721199A: Equity Markets, 5 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Oulu Business School
Arvostelu: 1 - 5, pass, fail
Opettajat: Tuppurainen, Risto Kalevi
Opintokohteen kielet: English
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period D.
Learning outcomes:
Upon completion of this course, the student discovers behavioral biases in investor behavior and how these biases potentially affect stock prices. In addition, he/she can distinguish and explain various limits of arbitrage that can facilitate prolonged mispricings in equity markets. Furthermore, the student is able to compare historical returns and risks of various equity market trading strategies based on results published in leading scientific journals. On the basis of this, the student is capable of carrying out more rational investment decisions in equity markets.
Contents:
Trading mechanisms and price setting in equity markets; market efficiency and behavioral finance; limits of arbitrage such as illiquidity, noise trader risk, fundamental risk, model risk, and costs and risks of short selling; psychology and investor behavior; investment strategies that seek to exploit pricing anomalies including value strategies, momentum strategies, asset growth strategies, and earnings announcement related strategies; effect of investor sentiment on stock returns; the role of equity analysts.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures 40h, self-study 89h, exam 4h.
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:

The recommended prerequisite is Investments (721361P). In addition, basic knowledge of statistical inference and hypotheses testing would be useful.
Recommended optional programme components:
-
Recommended or required reading:
Thaler: Advances in Behavioral Finance. Vol II; Nofsinger: The Psychology of Investing. Pearson 2nd edition. Additional material provided by the instructor.
Check availability from here.
Assessment methods and criteria:
Students complete the course in the faculty examination. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.
Person responsible:
Postdoctoral researcher Petri Kyröläinen.
Working life cooperation:
-
Other information:
The number of students is limited.

721954S: Financial Econometrics, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Hannu Kahra

Opintokohteen kielet: English

ECTS Credits:
6 ECTS credits / 160 hours of work.
Language of instruction:
English.

Timing:
Period D.

Learning outcomes:
After completing the course students should: understand the important features of time series of market prices, appreciate the relevance of efficient market theory to predicting prices, be familiar with appropriate methods for forecasting price volatility, be able to use option prices to make statements about the distributions of future asset prices, be informed about a broad range of econometric methods that are applied in finance research, be able to apply extreme value theory in calculating value at risk of a financial position, and be able to apply R to financial time series data.
Contents:
Probability foundations (probability concepts, prices, returns and volatility clustering, stochastic processes, ARMA models for financial returns), stylized facts for returns from financial assets, expected returns using time series information (testing for a random walk process using the variance-ratio test, methods that use trading rules to assess the predictability of returns and the efficiency of markets), modeling volatility using time series information (univariate and multivariate GARCH models and stochastic volatility), and a review of econometric methods (maximum likelihood, GMM, MCMC and Kalman filter).
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures and assignments 40h, self-study 116h, exam 4h. R, an open-source computing package is applied in the course.
Target group:
Students majoring in finance.
Prerequisites and co-requisites:
Introduction to Econometrics (721060A) must be completed before attending this course.
Recommended optional programme components:

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Recommended or required reading:
Tsay: Analysis of Financial Time Series, John Wiley & Sons, 2 nd edition; Taylor: Asset Price Dynamics, Volatility, and Prediction, Princeton University Press; and material provided by the instructor.
Check availability from here.
Assessment methods and criteria:
Assessment methods include assignments and computer lab exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.

Person responsible:
Professor Hannu Kahra.

Working life cooperation:
-
Other information:
The number of students is limited.

721174P: Financial Risk Management, 5 op

Voimassaolo: 01.10.2006 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Perttunen, Jukka Olavi

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay721174P Financial Risk Management (OPEN UNI) 5.0 op

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period C.
Learning outcomes:
Upon completion the student should be able to apply basic derivative securities in financial risk management.
Contents:
Financial risks, asset price as a random variable, forward contracts, futures contracts, swaps, options.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures 36h, self-study 93h, exam 4h .
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:
The recommended prerequisite is the completion of 721178P Fundamentals of Corporate Finance and 721361P Investments.
Recommended optional programme components:
-
Recommended or required reading:
Lecture notes; a recommended reading is Hull: Risk Management and Financial Institutions, Pearson.
Check availability from here.
Assessment methods and criteria:
There are two intermediate exams during the course. Each of the intermediate exams can be used to replace one of the five problems in the final exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.

Person responsible:
Professor Jukka Perttunen.
Working life cooperation:
-
Other information:
The number of students is limited.

721370A: Fixed Income Securities, 5 op

Voimassaolo: 01.08.2010 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Hannu Kahra

Opintokohteen kielet: English

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period B.
Learning outcomes:
Upon completion of the course, the student knows the pricing of basic fixed income assets, is able to apply basic term structure models and fit stochastic interest rate models to data.
Contents:
Effective risk management is essential in today’s uncertain business environment. Derivatives and especially fixed income derivatives are standard instruments for managing financial risk. It is critical for anyone involved in corporate or financial risk management to have a deep-rooted understanding of interest rate risk and fixed income securities. This course explores key issues in fixed income. It develops tools for valuing and modeling the risk exposures of fixed income securities and their derivatives, with the ultimate goal of deploying these instruments in a corporate or financial risk management setting. The course is divided into three parts, covering (1) basic fixed income securities, (2) fixed income derivatives with a focus on popular interest rate models used to value them and (3) quantitative management of fixed income portfolios. To make the material broadly accessible, concepts are, whenever possible, explained through hands-on applications and examples, rather than through advanced mathematics.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures and assignments 40h, self-study 89h, exam 4h. R, an open-source computing package, is applied in the course.
Target group:
Students with a major on minor in finance.
Prerequisites and co-requisites:
Financial Risk Management (721174P) must be completed before attending this course.
Recommended optional programme components:
-
Recommended or required reading:
Tuckman: Fixed Income Securities - Tools for Today's Markets, Wiley & Sons; and material provided by the instructor.
Check availability from here.
Assessment methods and criteria:
Assessment methods include assignments, teamwork and exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.
Person responsible:
Professor Hannu Kahra.
Working life cooperation:
-

Other information:
The number of students is limited.

721178P: Fundamentals of Corporate Finance, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Mirjam Lehenkari, Andrew Conlin

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay721178P Fundamentals of Corporate Finance (OPEN UNI) 5.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period A.
Learning outcomes:
Upon successful completion of the course, the student will be able to: define the major areas of corporate finance and the primary goal of financial management; calculate cash flow from assets and its components; demonstrate an understanding of the relationship between growth and external financing requirements; apply time value of money principles in a variety of contexts; demonstrate an understanding of different types of interest rates; explain the fundamental differences between debt and equity; describe the key features of bonds; master the basics of bond valuation; apply the dividend growth model to stock valuation; evaluate investment projects using various investment appraisal techniques; recognize the trade-off between risk and return; distinguish between various types of risks; explain the logic underlying the CAPM and apply the model; calculate the cost of capital for a firm; explain the reasoning behind the Modigliani-Miller theories of capital structure and dividend policy; quantify the effects of financial leverage on firm value; explain how dividends are paid and how firms repurchase shares; and identify factors that influence dividend policy in practice.
Contents:
The course is an introduction to the theory and practice of financial management. The objective is to familiarize the student with the basic concepts and principles in the field of corporate finance, and to provide the student with an understanding of the key decision-making processes and tools of financial management.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures 20h, self-study 109h, exam 4h.
Target group:
Students with a major or minor in finance or accounting.
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
Ross, Westerfield & Jordan: Fundamentals of Corporate Finance (4 th or later edition) / Corporate Finance Fundamentals, Irwin/McGraw-Hill; a handout prepared by the lecturers
Check availability from here.
Assessment methods and criteria:
Students complete the course in the faculty examination. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.
Person responsible:
Researcher Andrew Conlin and postdoctoral researcher Mirjam Lehenkari.
Working life cooperation:
-

Other information:
The number of students is limited.
The course will also be lectured in Finnish.

721060A: Introduction to Econometrics, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Marko Korhonen

Opintokohteen kielet: Finnish

ECTS Credits:
5 ECTS
Language of instruction:
Finnish
Timing:
Period A (3 rd year autumn).
Learning outcomes:
After completing the course students should be familiar with using of basic econometric models in the analysis of different economic phenomena.
Contents:
Introduction to the methodology of econometrics, basic probability concepts, essential features of linear regression and time series models, hypothesis testing and using of E-views software.
Mode of delivery:
Contact teaching.
Learning activities and teaching methods:
28 hours of lectures, 14 hours of exercises and independent reading of the textbooks.
Target group:
Mandatory for bachelor students in following majors: Accounting, Economics, Finance.
Prerequisites and co-requisites:
Basic Methods in Statistics 1.
Recommended optional programme components:
None.
Recommended or required reading:
Stock James H., Watson Mark W.: Introduction to Econometrics, 2. edition. Other material announced during the lectures.
Assessment methods and criteria:
Lectures and a literature examination.
Grading:
1-5.
Person responsible:
Marko Korhonen.
Working life cooperation:
None.
Other information:
The number of students is limited.

721364P: Introduction to Empirical Finance, 5 op

Voimassaolo: 01.08.2010 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Hannu Kahra

Opintokohteen kielet: English

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.

Timing:
Period C.
Learning outcomes:
Upon completion of this course, the student is able to use R for financial problem solving, e.g. to fit, analyze and evaluate ordinary least squares (OLS) models applied to simple asset pricing problems. Furthermore, the student has acquired basic skills in statistical programming.
Contents:
Empirical finance is the intersection of the fields of econometrics and finance to solve financial problems. Focusing on implementation rather than theory, the course serves as an accessible introduction to statistical problem solving in finance. First, the course reviews basic concepts in probability and classical statistical inference. Thereafter the course introduces students to the calculation of basic statistical measures, statistical testing and inference, risk and return calculation, and the basics of regression analysis. The selection of topics includes the traditional core material of computational finance: probability and statistics, matrix algebra and regressions. The methods are applied to basic asset pricing models and simple portfolio choice problems.
Mode of delivery:
Face-to-face delivery.
Learning activities and teaching methods:
Working methods include lectures and computer lab exercises (40h), independent studying of textbooks and other material (89h), and exam (4h). Alongside, providing theoretical back ground for statistics and econometrics, the lectures are aimed to introduce students to the use of R in financial problem solving. During computer lab exercises, students are given various programming and computing problems to solve using the R programming language.
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:
Knowledge of basic statistics and/or econometrics is required.
Recommended optional programme components:
The course is an alternative to Introduction to Market Analysis (721363P).
Recommended or required reading:
Basic R for Finance, Rmetrics Association & Finance Online and material provided by the instructor.
Assessment methods and criteria:
Assessment methods include assignments, empirical project and computer lab exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.

Person responsible:
Professor Hannu Kahra

Working life cooperation:
-
Other information:
The number of students is limited.

721362P: Introduction to Financial Economics, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Hannu Kahra

Opintokohteen kielet: English

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period A.
Learning outcomes:
Upon completion of the course, the student understands that finance and economics are closely related topics. Finance is based on economic theory and the behavior of the economy is affected by the behavior of financial markets.
Contents:
First, the course provides the students a review of the history of the fundamental contributions in financial economics that have profoundly influenced modern investment theory and shaped the capital and derivatives markets. Thereafter, the course reviews decision-making under uncertainty, portfolio choice, systems of financial markets, arbitrage and option pricing, firms and financial markets, symmetric and asymmetric information, bank regulation, the role of financial intermediaries, and behavioural finance.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures 40h, self-study 89h, exam 4h.
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
Pilbeam: Finance & Financial Markets, Pargrave Macmillan, 3 rd edition, Howells & Bain: Financial Markets and Institutions, FT Prentice Hall, 5 th edition, and material provided by the instructor.
Check availability from here.
Assessment methods and criteria:
Students complete the course in the faculty examination. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.
Person responsible:
Professor Hannu Kahra.
Working life cooperation:
-
Other information:
The number of students is limited.

721363P: Introduction to Market Analysis, 5 op

Voimassaolo: 01.08.2010 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Tuomo Haapalainen

Opintokohteen kielet: Finnish

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period D.
Learning outcomes:
After the course, students are able to solve financial problems using statistical software, namely, Excel and SAS. Students are able to apply statistical analysis and inference to test scientific hypotheses. They will also gain

knowledge in fields special to finance, namely, they will be able to calculate returns and risks of publicly traded stocks, do technical analysis and allocate wealth over multiple assets. Students will also learn how to investigate dependency between variables using regression analysis. After the course, students will have the necessary level of programming skills to learn more about Excel and SAS on their own.

Contents:
The course introduces students to the calculation of basic statistical measures, statistical testing and inference, risk and return calculation, and basics of regression analysis. Also basic methods for analyzing stock price behaviour through technical analysis will be covered. Students will also become familiar with the most basic asset allocation decisions.

Mode of delivery:
Face-to-face teaching.

Learning activities and teaching methods:
Working methods include lectures (16h) and computer lab exercises (24h), independent studying of textbooks, manuals and other material (89h), and an exam (4h). Alongside providing theoretical background for statistics and econometrics, the lectures are aimed to introduce students to the use of Excel and SAS in financial problem-solving. During computer lab exercises, students are given various calculation problems to solve using these programming languages.

Target group:
Students with a major or minor in finance.

Prerequisites and co-requisites:
The recommended prerequisite is the completion of Investments (721361P) prior to enrolling for the course unit.

Recommended optional programme components:
The course is an alternative to Introduction to Empirical Finance (721364P).

Recommended or required reading:
Material announced during the lectures, including lecture notes, textbooks and manuals.

Assessment methods and criteria:
Assessment methods include assignments and computer lab exam. The assessment criteria are based on the learning outcomes of the course.

Grading:
1-5.

Person responsible:
N.N.

Working life cooperation:
-

Other information:
The number of students is limited.

721361P: Investments, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opettajat: Mirjam Lehenkari, Andrew Conlin

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay721361P	Investments (OPEN UNI)	5.0 op

ECTS Credits:
5 ECTS credits / 133 hours of work.

Language of instruction:
English.

Timing:
Period B.

Learning outcomes:
Upon successful completion of the course, the student will be able to: describe the most common types of securities and explain where and how they are traded; demonstrate an understanding of the conceptual foundations of modern portfolio theory; outline the benefits of diversification; distinguish between various types of risks; master the basics of portfolio optimization; derive the CAPM and discuss the implications of the model for

asset pricing; describe the fundamental ideas behind the APT; compare and contrast CAPM and APT; apply CAPM and APT using single-index and multifactor models of security returns; define and explain the efficient market hypothesis (EMH); differentiate between the three forms of market efficiency; explain the implications of the EMH for investment policy; and apply dividend discount and free cash flow models and multiples to stock valuation.

Contents:
The course is an introduction to the fundamentals of modern investment theory. The objective of the course is to develop the student's knowledge of the types of financial instruments and of the structure and operation of security markets, and to provide the student with an understanding of the theoretical foundations and application of modern portfolio theory and equilibrium models of security prices.

Mode of delivery:
Face-to-face teaching.

Learning activities and teaching methods:
Lectures 20h, self-study 109h, exam 4h.

Target group:
Students with a major or minor in finance.

Prerequisites and co-requisites:
-

Recommended optional programme components:
-

Recommended or required reading:
Bodie, Kane & Marcus: Investments (4 th or later edition), Irwin/McGraw-Hill; a handout prepared by the lecturers. Check availability from here.

Assessment methods and criteria:
Students complete the course in the faculty examination. The assessment criteria are based on the learning outcomes of the course.

Grading:
1-5.

Person responsible:
Researcher Andrew Conlin and postdoctoral researcher Mirjam Lehenkari.

Working life cooperation:
-

Other information:
The number of students is limited. The course will also be lectured in Finnish.

721950S: Master's Thesis, Finance, 30 op

Opiskelumuoto: Advanced Studies

Laji: Diploma thesis

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish, English

ECTS Credits:
30 ects.

Language of instruction:
Finnish / English.

Timing:
Periods A-D.

Learning outcomes:
The students will become familiar with conducting independent academic research and be able to apply academic research methodology in the field of finance.

Contents:
The aim of the course is to support students writing their master's thesis. The students present their research reports at least twice during the academic year.

Assessment methods and criteria:
Participation in seminars, accepted research reports.

Grading:
1-5.

Person responsible:
Professor Jukka Perttunen and professor Hannu Kahra.

Other information:
The number of students is limited.

721952S: Portfolio Management, 6 op

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

ECTS Credits:
6 ECTS credits / 160 hours of work.
Language of instruction:
English.

Timing:
Periods A-D.
Learning outcomes:
The students will become familiar with the basic quantitative methods of modern portfolio management as well as be able to apply them in practice. After the course the student is able to explain the challenges for portfolio management, and design methodologies in portfolio management implementations. Specifically, students are able to solve analytically Markowitz's portfolio choice and can use modern techniques to estimate required inputs such as expected returns and covariance matrix of returns.
Contents:
The course introduces the students to the applying of advanced portfolio management techniques. The first part of the course focuses on the analytical solution of the Markowitz's portfolio choice problem and its extensions. The second part of the course applies portfolio choice techniques in practice. Each student implements his/her personal portfolio management based on the modern portfolio choice techniques. The artificial portfolio policy is applied over the academic year.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures and exercises 40h, teamwork, seminar and self-study 116h, exam 4h. SAS and R, an open-source computing package, are applied in the course.
Target group:
Students majoring in finance.
Prerequisites and co-requisites:
-
Recommended optional programme components:
-
Recommended or required reading:
Litterman and Goldman Sachs Quantitative Resources Group: Modern Investment Management – An Equilibrium Approach, Wiley & Sons; Ilmanen: Expected Returns: An Investor's Guide to Harvesting Market Rewards, Wiley. Check availability from here.
Assessment methods and criteria:
Assessment methods include portfolio management project and exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.

Person responsible:
Professor Jukka Perttunen and Sinikka Kaattari.
Working life cooperation:
-
Other information:
The number of students is limited.

721951S: Portfolio Performance Analysis, 6 op

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

ECTS Credits:
6 ECTS credits / 160 hours of work.

Language of instruction:
English.

Timing:
Period B.

Learning outcomes:
After the course the student is able to use basic return and holdings based techniques in portfolio performance analysis. Upon completing the course the student is able to apply techniques in practice using the SAS software.

Contents:
The term “performance analysis” covers the techniques that are implemented to study the results of portfolio management. These range from simple performance measurement to performance attribution. Performance measurement consists of measuring the difference in the value of the portfolio, or investment fund, between the beginning and the end of the evaluation period. Performance attribution breaks down the return to attribute the exact contribution of each phase in the process to the overall portfolio performance, thus allowing the manner in which the result was obtained to be understood. The intermediate step is performance evaluation, which explains how the measured return was obtained and whether the result is due to skill or luck.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures and assignments 40h, self-study 116h, exam 4h. SAS software package is applied in the course.

Target group:
Students with a amjor or minor in finance.
Prerequisites and co-requisites:
Basic knowledge of SAS software is recommended before participating to the course; course Introduction to Market Analysis (721363P) could be helpful. Basic knowledge of econometrics is also recommended; course Introduction to Econometrics (721060A) is recommended before participating to the course.
Recommended optional programme components:
Contents of the course are related to the following courses: Introduction to Market Analysis (721363P), Portfolio Management (721952S), and Asset Pricing (721383S).
Recommended or required reading:
Aragon & Ferson: Portfolio Performance Evaluation, Boston - Delft and material provided by the instructor. Check availability from here.
Assessment methods and criteria:
Students complete the course in the faculty examination. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.

Person responsible:
ResearcherTuomo Haapalainen.
Working life cooperation:
-
Other information:
The number of students is limited.

721924A: Seminar in Finance, 10 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Oulu Business School
Arvostelu: 1 - 5, pass, fail
Opettajat: Mirjam Lehenkari
Opintokohteen kielet: Finnish

ECTS Credits:
10 ects.
Language of instruction:
Finnish/English
Timing:
Periods A-D.
Learning outcomes:
Upon successful completion of this course, the student will be able to: effectively acquire information; critically evaluate the quality and worth of information; cite references properly; define a research topic and provide a rationale for it; combine pieces of information with a view to problem solving; and present the results of his/her work clearly and accurately.
Contents:
This course is an introduction to conducting scientific research in the field of finance. The objective of the course is to develop the student's scientific thinking, acquiring, organizing, and processing information, as well as scientific writing and communicating skills.

Learning activities and teaching methods:
Introductory lectures, information-retrieval training sessions, independent work, and seminar sessions.
Recommended or required reading:
Instructions for Thesis Work (a handout).
Grading:
1-5.
Person responsible:
Postdoctoral Researcher Mirjam Lehenkari.
Other information:
A bachelor's degree involves a maturity test and the thesis must be bound in hard covers. A student who already has a bachelor's degree should contact the course instructor.

The number of students is limited.

721955S: Special Issue in Finance, 6 op

Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuyksikkö: Oulu Business School
Arvostelu: 1 - 5, pass, fail
Opettajat: Perttunen, Jukka Olavi
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
6 ects.
Language of instruction:
Free.
Timing:
Free.
Learning outcomes:
To be agreed with the professor of finance.
Grading:
1-5.

Person responsible:
The professor of Finance.

721922A: Theory of Corporate Finance, 5 op

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

ECTS Credits:
5 ECTS credits / 133 hours of work.
Language of instruction:
English.
Timing:
Period C.
Learning outcomes:
Upon completion of this course, the student can explain the main concepts of theoretical corporate finance based on asymmetric information and psychology. He/she is capable of analyzing how corporate managers optimally choose capital structures and payout policies. The student is able to identify key motives for mergers & acquisitions, and to calculate costs and benefits mergers & acquisitions in simple cases where valuations are given. In addition, he/she is able to explain how corporate managers can defend themselves against takeovers. He /she can also analyze how conflicts of interest between different corporate stakeholders and psychological biases affect corporate decision making. Finally, the student is able to apply corporate governance methods to alleviate these problems.
Contents:
Signaling and agency theory, security issuance decisions, optimal capital structure, adjustment of capital structure, dividend policy, repurchase decision, choice and valuation of cash holdings, mergers and acquisitions.
Mode of delivery:
Face-to-face teaching.
Learning activities and teaching methods:
Lectures and article presentations 40h, group work 20h, self-study 69h, exam 4h.
Target group:
Students with a major or minor in finance.
Prerequisites and co-requisites:
The recommended prerequisite is Fundamentals of Corporate Finance (721178P). In addition, basic knowledge of statistical inference and hypotheses testing would be useful.
Recommended optional programme components:
-
Recommended or required reading:
Copeland, Weston & Shastri: Financial Theory and Corporate Policy, Pearson; additional material provided by the instructor
Check availability from here.
Assessment methods and criteria:
Assessment methods include article presentation and exam. The assessment criteria are based on the learning outcomes of the course.
Grading:
1-5.
Person responsible:
Postdoctoral researcher Petri Kyröläinen.
Working life cooperation:
-
Other information:
The number of students is limited.