

Opasraportti

TaTK - Finance 2009-2010 (2009 - 2010)

FINANCE

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.

Learning outcomes

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.

BASIC STUDIES

721178P Fundamentals of Corporate Finance 3 ov/5 op
 721361P Investments 3 ov/5 op
 721174P Financial Risk Management 3 ov/5 op
 721902P Security Analysis 3 ov/5 op
 721115P Theory of Money, Banking and Monetary Policy 3 ov/5 op

INTERMEDIATE STUDIES

In addition to basic studies:

721921A Empirical Research in Finance 5 ov/10 op
 721923A Corporate Analysis 3 ov/5 op
 721198A Derivative Securities 3 ov/5 op
 721199A Equity Markets 3 ov/5 op
 721922A Theory of Corporate Finance 3 ov/5 op

Ans at least 5 ects of these:

721170A Financial Analysis and Firm Valuation 3 ov/5 op

721247A Analysis of Competition 3 ov/5 op
 721226A Basic Econometrics 3 ov/5 op
 721241A Internship 3 ov/5 op
 721009A Additional intermediate studies in Finance 3 ov/5 op

ADVANCED STUDIES

721950S Master's Thesis 16 ov/30 op
 721951S Portfolio Performance Evaluation 3 ov/6 op
 721952S Portfolio Management 3 ov/6 op
 721954S Financial Econometrics 3 ov/6 op
 721383S Empirical Asset Pricing 3 ov/5 op

And at least 6 ects of these:

721189S Advanced Financial Analysis 3 ov/6 op
 721190S Advanced Firm Valuation 3 ov/6 op
 721339S Econometric Analysis 3 ov/6 op
 721384S Interest and Exchange Rate Markets 3 ov/6 op
 721310S Macroeconomic Analysis 3 ov/6 op
 721320S Microeconomic Analysis 3 ov/6 op
 721955S Special Issue 3 ov/6 op

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

721009A: Additional Courses in Finance, Intermediate Level, 0 op
 721923A: Corporate Analysis, 5 op
 721198A: Derivative Securities, 5 op
 721383S: Empirical Asset Pricing, 6 op
 721921A: Empirical Research in Finance, 10 op
 721199A: Equity Markets, 5 op
 721241A: Field Project, 5 op
 721954S: Financial Econometrics, 6 op
 721174P: Financial Risk Management, 5 op
 721178P: Fundamentals of Corporate Finance, 5 op
 721361P: Investments, 5 op
 721950S: Master's Thesis, Finance, 30 op
 721952S: Portfolio Management, 6 op
 721951S: Portfolio Performance Evaluation, 6 op
 721902P: Security Analysis, 5 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

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 ects.

Language of instruction:

Free.

Timing:

Free.

Learning outcomes:

To be agreed with professor in finance.

Grading:

1-5.

Person responsible:

Professor in finance.

721923A: Corporate Analysis, 5 op

Voimassaolo: - 31.07.2010

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Kyröläinen, Petri Juhani

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ects.

Language of instruction:

English.

Timing:

Literature examination.

Learning outcomes:

The students will become familiar with the analysis of corporate-specific information used in investment decisions.

Contents:

The course introduces students to the analyzing of corporate's economic performance and risks especially from the investor's point of view.

Learning activities and teaching methods:

Independent studying of the text book.

Recommended or required reading:

Will be announced later.

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

Assistant Professor Mika Pirneskoski.

721198A: Derivative Securities, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Perttunen, Jukka Olavi

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ect.

Language of instruction:

English.

Timing:

Period C.

Learning outcomes:

The students will become familiar with the principles and basic methods of pricing of derivatives securities as well as be able to apply them in the pricing and hedging of advanced derivatives securities.

Contents:

The course aims to deepen the understanding of the theory and the pricing mechanism of derivative securities. Topics covered are the risk-neutral valuation principle, analytical and numerical valuation methods, the hedging of derivative securities, and volatility estimation.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of text books.

Recommended or required reading:

Hull: Options, Futures & Other Derivatives, Pearson, 6th edition.

[Availability of course books.](#)

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

Professor Jukka Perttunen.

721383S: Empirical Asset Pricing, 6 op

Voimassaolo: 01.08.2008 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Hannu Kahra

Opintokohteen kielet: English

ECTS Credits:

6 ect.

Language of instruction:

English.

Timing:

Period: A.

Learning outcomes:

The students will become familiar with the stochastic discount factor used in asset pricing literature as well as in the framework of GMM estimation.

Contents:

The course aims to deepen the understanding of the asset pricing theory especially in the stochastic discount factor (SDF)/general method of moments (GMM) framework.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of text books.

Recommended or required reading:

Cochrane: Asset Pricing, Oxford University Press, 2nd edition; Singleton: Empirical Dynamic Asset Pricing: Model Specification and Econometric Assessment, Princeton University Press.

[Availability of course books.](#)

Assessment methods and criteria:

Exam, assignments.

Grading:

1-5.

Person responsible:

University lecturer Hannu Kahra.

721921A: Empirical Research in Finance, 10 op

Voimassaolo: - 31.12.2011

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Perttunen, Jukka Olavi

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

10 ect.

Language of instruction:

English.

Seminar for bachelor students: Finnish

Timing:

The seminar will be arranged in Fall Semester 2010.

Learning outcomes:

The students will become familiar with the empirical analysis of financial data and reporting the research results.

Seminar for bachelor students: The students will become familiar with conducting academic research in the field of finance.

Contents:

The course introduces students to the empirical research methods in finance. Topics covered are the choice of the research method, the research design, the use of financial data bases, the implementation of empirical analyses, and the reporting of research results.

Seminar for bachelor students: The course introduces students to the academic literature as well as reporting and presenting research results in the field of finance. The students will write a seminar paper, which prepares students for writing the Master's thesis during the final year of their studies.

Learning activities and teaching methods:

40 hours of lectures and exercises.

Seminar for bachelor students: Lectures, seminar work.

Recommended or required reading:

Material provided by the lecturer.

Assessment methods and criteria:

Exam, assignments.

Seminar for bachelor students: Seminar work.

Grading:

1-5.

Person responsible:

Professor Jukka Perttunen.

Other information:

Course is offered for master's degree students only ("maisteritason erillisvalinta").

Seminar for bachelor students: Course is mandatory for all bachelor's degree students in finance.

721199A: Equity Markets, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Kyröläinen, Petri Juhani

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ect.

Language of instruction:

English.

Timing:

Period D.

Learning outcomes:

The students will become familiar with the recent empirical research evidence in equity markets, especially those in investor behaviour.

Contents:

The course aims to deepen the knowledge and the understanding of the behavior of equity markets, especially from the point of view of behavioral finance research.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of text books.

Recommended or required reading:

Thaler: Advances in Behavioral Finance. Vol II; Nofsinger: The Psychology of Investing, Pearson 4th edition.

Other material announced during the lectures.

[Availability of course books.](#)

Assessment methods and criteria:

Exam, assignments.

Grading:

1-5.

Person responsible:

Researcher Petri Kyröläinen.

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 ect.

Language of instruction:

Free.

Timing:

Free.

Learning outcomes:

To be agreed with professor.

Grading:

1-5.

Person responsible:

The professor(s) of the major.

721954S: Financial Econometrics, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Hannu Kahra

Opintokohteen kielet: English

ECTS Credits:

6 ects.

Language of instruction:

English.

Timing:

Period: D.

Learning outcomes:

The students will become familiar with the use of econometric time-series analyses in finance research.

Contents:

The course introduces the students to the applying of econometric time-series techniques in financial research. The topics covered are linear and non-linear models with their applications, conditional heteroskedasticity in volatility estimation, market microstructure models, and MCMC-methods with their applications.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of text books.

Recommended or required reading:

Tsay: Analysis of Financial Time Series, John Wiley & Sons, 2nd edition.

[Availability of course books.](#)

Assessment methods and criteria:

Exam, assignments.

Grading:

1-5.

Person responsible:

University lecturer Hannu Kahra.

721174P: Financial Risk Management, 5 op

Voimassaolo: 01.10.2006 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Pirneskoski, Mika Olavi

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay721174P Financial Risk Management (OPEN UNI) 5.0 op

ECTS Credits:

5 ects.

Language of instruction:

English.

Timing:

Period C.

Learning outcomes:

Students will become familiar with the nature of financial risks and understand the basic methods of financial risk management.

Contents:

The course introduces students to the basic concepts of financial risk management: evaluation and management of market risk, credit risk, and operational risk.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of text books.

Recommended or required reading:

Hull: Risk Management and Financial Institutions, Pearson.

[Availability of course books.](#)

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

Assistant Professor Mika Pirneskoski.

721178P: Fundamentals of Corporate Finance, 5 op**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Faculty of Economics and Business Administration**Arvostelu:** 1 - 5, pass, fail**Opettajat:** Mirjam Lehenkari**Opintokohteen kielet:** Finnish**Leikkaavuudet:**

ay721178P Fundamentals of Corporate Finance (OPEN UNI) 5.0 op

Voidaan suorittaa useasti: Kyllä**ECTS Credits:**

5 credits.

Language of instruction:

Course is lectured separately in Finnish and in English.

Timing:

Period A

Learning outcomes:

Students will become familiar with capital budgeting and financial planning as well as understand the theoretical foundations of financial decisions of a corporation.

Contents:

The course introduces students to the basic concepts of corporate finance: financial planning, capital budgeting, capital structure decisions, and dividend policy.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of textbooks.

Recommended or required reading:

Ross, Westerfield & Jordan: Fundamentals of Corporate Finance. Irwin/McGraw-Hill, 4th (or later) ed.

[Availability of course books.](#)**Assessment methods and criteria:**

Exam.

Grading:

1-5.

Person responsible:

Assistant Professor Mirjam Lehenkari (in Finnish) and Assistant Professor Mika Pirneskoski (in English).

721361P: Investments, 5 op**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Faculty of Economics and Business Administration**Arvostelu:** 1 - 5, pass, fail**Opettajat:** Mirjam Lehenkari**Opintokohteen kielet:** Finnish**Leikkaavuudet:**

ay721361P Investments (OPEN UNI) 5.0 op

ECTS Credits:

5 ects.

Language of instruction:

Course is lectured separately in Finnish and in English.

Timing:

Period B.

Learning outcomes:

Students will become familiar with the theoretical foundations of equity pricing and master the basic methods of modern portfolio theory.

Contents:

The course introduces students to the basic concepts of capital markets and portfolio theory: the choice of optimal portfolio, capital market equilibrium models, and security valuation.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of textbooks

Recommended or required reading:

Bodie, Z., Kane, A. & Marcus, A. J.: Investments. Irwin/ Mc-Graw-Hill. 4th ed. 1999.

[Availability of course books.](#)

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

Assistant Professor Mirjam Lehenkari (in Finnish) and Assistant Professor Mika Pirneskoski (in English).

721950S: Master's Thesis, Finance, 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, English

ECTS Credits:

30 ect.

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:

Approbatur-Laudatur.

Person responsible:

Professor Jukka Perttunen and university lecturer Hannu Kahra.

721952S: Portfolio Management, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Juha Joenväärä

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 ects.

Language of instruction:

English.

Timing:

Period A.

Learning outcomes:

The students will become familiar with the basic methods of modern portfolio management as well as be able to apply them in practice.

Contents:

The course introduces the students to the applying of advanced portfolio management techniques. As a part of the course, each student prepares a personal portfolio management policy, which is then applied in managing of an artificial investment portfolio over the academic year.

Learning activities and teaching methods:

40 hours of lectures and exercises, teamworks, seminars.

Recommended or required reading:

Material provided by the lecturer.

Assessment methods and criteria:

Exam, assignments.

Grading:

1-5.

Person responsible:

Researcher Juha Joenväärä.

721951S: Portfolio Performance Evaluation, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Hannu Kahra

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 ects.

Language of instruction:

English.

Timing:

Period B.

Learning outcomes:

The students will become familiar with the basic methods of modern portfolio performance evaluation as well as apply them in practice.

Contents:

The course introduces the students to the applying of advanced portfolio performance evaluation techniques.

Learning activities and teaching methods:

40 hours of lectures and exercises, teamworks, seminars.

Recommended or required reading:

Aragon & Ferson: Portfolio Performance Evaluation, Boston – Delft.

Assessment methods and criteria:

Exam, assignments.

Grading:

1-5.

Person responsible:

University Lecturer Hannu Kahra.

721902P: Security Analysis, 5 op

Voimassaolo: - 31.07.2010

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Tuomo Haapalainen

Opintokohteen kielet: Finnish

ECTS Credits:

5 ects.

Language of instruction:

Finnish.

Timing:

Period C.

Learning outcomes:

The students will become familiar with the use of basic technical analysis in the price development of publicly traded stocks.

Contents:

The course introduces students to the basic methods for analyzing security price behavior: calculation of return and risk, technical analysis, spreadsheet models, basics of SAS programming.

Learning activities and teaching methods:

28 hours of lectures and exercises, independent studying of textbooks.

Recommended or required reading:

Murphy: Technical Analysis of Financial Markets. Other material announced during the lectures.

[Availability of course books.](#)

Assessment methods and criteria:

Exam, assignments.

Grading:

1-5.

Person responsible:

Researcher Tuomo Haapalainen and Researcher Pekka Tolonen.

721955S: Special Issue in Finance, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

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:

Period: Free.

Learning outcomes:

To be agreed with 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: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Kyröläinen, Petri Juhani

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ects.

Language of instruction:

English.

Timing:

Period C.

Learning outcomes:

The students will become familiar with the basic models of the theory of corporate finance, especially with the role of asymmetric in the financial theories.

Contents:

The course aims to deepen the understanding of the theoretical foundations of corporate finance, especially, the role of asymmetric information in financial decision making.

Learning activities and teaching methods:

40 hours of lectures and exercises, independent studying of textbooks.

Recommended or required reading:

Copeland, Weston & Shastri: Financial Theory and Corporate Policy. Pearson; Amaro de Matos: Theoretical Foundations of Corporate Finance. Princeton University Press.

[Availability of course books.](#)

Assessment methods and criteria:

Exam, assignments.

Grading:

1-5.

Person responsible:

Researcher Petri Kyröläinen.