

Til: Programrådet
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Sak: Sak 33/2022
Sak: Endringer i emnet ECON4510 - Finance Theory
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Endringer i emnet ECON4510 - Finance Theory

Emneansvarlig søker om å gjøre endringer i emnebeskrivelsen, læringsmålene og pensumet i det valgfrie masteremnet ECON4510 – Finance Theory. Begrunnelsen er at han ønsker å strukturere emnet bedre.

Tekst som er farget i grønt er endringer, og tekst som er strøket ut er deler som fjernes fra emnebeskrivelsen/læringsmålene.

Course content

Topics include

- Absence of systematic arbitrage in competitive financial markets
- Time, money, and interest rates: basics of bond pricing
- Individual decision-making under uncertainty: frameworks to systematically analyze how to allocate resources between a set of projects with risky future payoffs, taking the risk-free rate and the market price of risk as given, ~~in particular expected utility and the mean-variance criterion.~~
- Gains from diversification and portfolio choice ~~Portfolio choice and separation.~~
- Economies of scale in asset management
- ~~Capital asset pricing models (also without riskless asset) and complete markets for state contingent claims, spanning, consequences for investment decisions.~~
- ~~Market efficiency, information Paradox.~~
- Basics of pricing of derivatives: another application of absence of arbitrage



- ~~Theory of pricing of derivative assets, such as forward and futures contracts and in particular options.~~
- Introduction to equilibrium asset pricing models where the risk-free rate and the market's discount factor is an (endogenous) equilibrium outcome: challenges jointly accounting for the distributions of macroeconomic quantities and prices in financial markets

Learning outcome

Knowledge

You should know:

- how to use arguments based on absence of systematic arbitrage to price financial assets
- the basics of capital budgeting and financing decisions: understand how to analyze and compare future cash flows
- how to improve risk-reward trade-offs by diversification and this can be applied to portfolio choice ~~the basic theory of portfolio choice and different equilibrium models for financial markets under one period uncertainty~~
- how basic microeconomic concepts such as economies of scale translate to finance and asset management
- the challenges of jointly accounting for the dynamics of macroeconomic quantities and prices in financial markets – and some of the potential resolutions
- ~~when, how, and to what extent the models are applicable~~
- ~~some elements of empirical research in the field~~
- ~~implications of the theory for capital budgeting and financing decisions in the private sector~~
- ~~the basics of absence of arbitrage pricing models applied to financial options which include binomial trees in discrete time as well as diffusions in continuous time.~~

Skills

You should be able to

- apply absence of arbitrage to real-life situations

- price bonds
- estimate the cost of capital for projects and firms taking the market price of risk as given
- analyze cash flows
- understand the tensions in general-equilibrium models striving to jointly account for prices and quantities
- be disappointed about the lack of coherent strategy of NBIM, the lack of governance, and that the organization publicly distribute noise instead of precise information
- use the various measures of risk for individual assets and for portfolios which includes what sources can be used to estimate these, how they are calculated, and how they are affected by, e.g., combining assets
- disentangle information about real world assets, e.g., financial assets (and loans), to find the relevant measures of risk and expected returns
- introduce relevant concepts of risk both in theoretical and practical considerations

Competence

You should

- be able to read and understand both financial reports ~~project reports~~ and journal articles that make use of the concepts and methods that are introduced in the course
- be able to make use of the course content in your own academic work, for example in analyses that are part of the master's thesis
- be able to make use of the course content in professional life, either you choose public service or private industry

Pensumendringer:

Emneansvarlig ønsker å beholde Berk and DeMarzo – Corporate Finance, men endre Danthine - Intermediate Financial theory til støttelitteratur. Begrunnelsen for endringen er at emneansvarlig har gode notater som erstatter den delen av emnet som benytter Danthine.

Forslag til vedtak:

Programrådet vedtar endringene som er foreslått. Endringene vil tre i kraft fra våren 2023.