

# Syllabus for “Financial Economics” EKN 865

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## 1 The Course

The course will introduce the students to the economic theory of asset markets. The central economic concepts that will be used are decision making under uncertainty and competitive/Walrasian equilibria. Most of the arguments will be rather formal/mathematical. The following topics and questions will be addressed:

1. Why do economic agents buy and sell assets?
2. How are assets and the preferences of economic agents formally modelled? Random variables, expected utility theory
3. How are competitive/Walrasian equilibria in static asset exchange markets determined? Competitive equilibria for two agents with CARA and CRRA Bernoulli utility functions
4. What are complete markets? Arrow-Debreu securities
5. The relationship between Equilibrium asset pricing theory for complete markets and Arbitrage-free asset pricing theory
6. The relationship between equilibrium asset prices and representative agent models. CAPM

7. Dynamic asset exchange markets: How is new information introduced into the model? Information partitions/filtrations and Bayesian updating
8. If there is time left: How to deal with asymmetric information between agents? Rational expectations equilibria

The structure and the time-schedule of the course is quite flexible. That is, whenever I realize that some topic requires more time because it is of particular interest to the students (or it is rather complex), I am prepared to give it this additional time. Students are invited to think along. Feedback, discussions, questions about ‘real world issues’ are highly welcome.

## 2 Textbooks and Literature

Recommended background reading for the course:

Chapters 1-2 in Duffie, D. (2001) *Dynamic Asset Pricing Theory*. Princeton University Press.

Several Chapters in Cochrane, J.H. (2005) *Asset Pricing*. Princeton University Press.

Dybvig P.H. and S.A. Ross (2003) Arbitrage, State Prices and Portfolio Theory. In: Constantinides G, Harris M, Stulz R (Eds) *Handbook of the Economics of Finance*, Vol 1B. Elsevier Science, Amsterdam, pp 605–637.

Chapter 19.E in Mas-Colell, A., Whinston, M.D. and J. Green (1995) *Microeconomic Theory*. Oxford University Press.

## 3 Evaluation

TBA. (Under normal circumstances a final exam; else, a mini research paper.)