



**LUND**  
UNIVERSITY

School of Economics and Management

## **NEKH81, Economics: Portfolio Selection, 7.5 credits**

*Nationalekonomi: Portföljvalsteori, 7,5 högskolepoäng*

First Cycle / Grundnivå

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### **Details of approval**

The syllabus was approved by The Board of the Department of Economics on 2011-06-07 and was last revised on 2019-11-05. The revised syllabus applies from 2019-11-05, spring semester 2020.

### **General Information**

This is a single subject intermediate course in economics belonging to the 'Financial Economics' specialisation. The course is optional within a number of undergraduate programmes at Lund University.

*Language of instruction:* Swedish

In some semesters the course can be taught in English, see the appropriate application catalogue.

*Main field of studies*

Economics

*Depth of study relative to the degree requirements*

G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

### **Learning outcomes**

#### **Knowledge and understanding**

Students shall have demonstrated a knowledge of portfolio theory and investment analysis, with particular emphasis on:

- the mean-variance model, especially ability to explain and critically appraise how the optimal portfolio is identified with and without a risk-free asset,
- factor models, including both the single index model and multifactor models,
- equilibrium models, with emphasis on the standard capital asset pricing model and the arbitrage pricing model,
- the efficient market hypothesis, especially knowledge of, and explanations of anomalies and how to test for inefficiencies by event-studies,

- valuation models, including both single-period and multi-period growth models,
- evaluation of portfolio management by benchmarking as well as by single parameter techniques.

### **Competence and skills**

Students shall have demonstrated an ability to independently:

- make calculations in order to construct a mean-variance efficient optimal portfolio by means of suitable software and empirical data,
- make calculations in order to construct efficient portfolios based on factor models,
- make calculations in order to test equilibrium pricing models such as the capital asset pricing model,
- analyse and interpret the results of their own applied work and testing,
- communicate the results, analyses and conclusions of an empirical financial investigation clearly and unambiguously to non-specialist audiences.

### **Judgement and approach**

Students shall have developed the ability to pursue further studies in the subject and should be able to search for and evaluate information with a high degree of independence. Students shall also have developed the ability to individually write an empirically orientated paper.

### **Course content**

This is a course in both theoretical and applied portfolio analysis. Topics covered include problems related to mean-variance theory, index models, equilibrium and arbitrage pricing models, theories about efficient markets, valuation and evaluation of portfolio management and investment analysis. The course aims at training students in using software in order to identify optimal portfolios under different market conditions.

### **Course design**

1. Teaching: Tuition consists of lectures and computer exercises. Assigned readings are an integral part of the teaching methods.

### **Assessment**

1. Examination: The examination consists of computer-based assignments and a written examination covering the reading materials and lectures. Each part of the examination must be passed. The written exam takes place at the end of the course. There will be further opportunities for examination close to this date. Other forms of examination may be used to a limited extent.

2. Limitations on the number of examination opportunities: –

The University views plagiarism and other academic dishonesty very seriously, and will take disciplinary action against students for any kind of attempted malpractice in connection with examinations and assessments. Plagiarism is considered to be a very serious academic offence. The penalty that may be imposed for this, and other unfair practices in examinations or assessments, includes suspension from the University for a specified period.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

## **Grades**

Marking scale: Fail, E, D, C, B, A.

1. Grading: The official grading scale is A, B, C, D, E and Fail.
2. Weighting grades from different parts of the course: –
3. Grading scales for different parts of the course: –

## **Entry requirements**

At least 20 ECTS-credits from the introductory course in economics, of which at least 7.5 ECTS-credits in microeconomics are needed for admission till all intermediate courses in economics. To be admitted to this particular course students must also have passed a course in basic financial economics.

## **Further information**

1. Transitional regulations: This course replaces NEKK11 "Portfolio Selection".
2. Limitations in the period of validity: –
3. Limitations: This course may not be included in the same degree as NEK623 "Portfolio Selection" or NEKK11 "Portfolio Selection".
4. Similar courses: –
5. Limitations in renewed examination: –

## Subcourses in NEKH81, Economics: Portfolio Selection

Applies from H11

1101 Portfolio Selection, 7,5 hp  
Grading scale: Fail, E, D, C, B, A