



APPLIES TO ACADEMIC YEAR 2016/2017

## DRE 4012 Asset Pricing Theory

### Programme

Finance; Economics

### Responsible for the course

Espen Henriksen

### Department

Department of Finance

### Term

According to study plan

### ECTS Credits

6

### Language of instruction

English

### Introduction

The objective of this course is to undertake a rigorous study of the foundations of modern financial economics in discrete-time settings. The course will cover the central themes of modern finance including investment decisions under uncertainty, mean-variance theory, dynamic capital-market equilibrium and asset valuation, and the potential application of these themes. Upon completion of this course, students should acquire a clear understanding of the major theoretical results concerning individuals' decisions under uncertainty and their implications for the valuations of securities.

### Learning outcome

#### Prerequisites

Admission to a PhD Programme is a general requirement for participation in PhD courses at BI Norwegian Business School.

External candidates are kindly asked to attach confirmation of admission to a PhD programme when signing up for a course with the doctoral administration. Other candidates may be allowed to sit in on courses by approval of the courseleader. Sitting in on courses does not permit registration for courses, handing in exams or gaining credits for the course. Course certificates or confirmation letters will not be issued for sitting in on courses

#### Compulsory reading

##### Books:

Back, K. E.. 2010. Asset Pricing and Portfolio Choice Theory. Oxford University Press.  
Cochrane, J. H.. 2005. Asset Pricing. Princeton University Press

##### Other:

During the course there may be hand-outs and other material on additional topics relevant for the course and the examination

#### Recommended reading

##### Course outline

Introduction and overview, review of basic economic theory, some empirical facts

Preferences, risk aversion

Portfolio choice in a two-period model

Markets: complete vs. incomplete, equilibrium, risk sharing

Arbitrage, state prices, law of one price, stochastic discount factors

Mean-variance analysis, beta representations

Conditional vs. unconditional models

Dynamic consumption-portfolio choice, dynamic programming

Equilibrium models, consumption CAPM, special cases

Exotic preferences: recursive, habit formation

Production models

Market imperfections: asymmetric information, transaction costs, capital immobility

### **Computer-based tools**

### **Learning process and workload**

#### **Examination**

Form of assessment and weighting:

30 % written submissions

70% 3 hour written final exam.

The course will be graded on the ECTS scale, A to F

#### **Examination code(s)**

DRE 40121 continuous assessment which accounts for 100 % of the final grade in the course DRE 4012.

#### **Examination support materials**

BI-approved exam calculator only

BI-approved exam calculator: TEXAS INSTRUMENTS BA II Plus™.

Instruction manuals can only be used at examinations where “all exam aids” are allowed. In cases where a BI-approved calculator is allowed, only one – 1- such calculator can be brought to the examination premises. In addition one simple calculator can be brought.

#### **Re-sit examination**

Re-takes are only possible at the next time a course will be held. When the course evaluation has a separate exam code for each part of the evaluation it is possible to retake parts of the evaluation. Otherwise, the whole course must be re-evaluated when a student wants to retake an exam.

#### **Additional information**

##### **Honour Code**

Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honour code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honour code system, to which the faculty are also deeply committed.

Any violation of the honour code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and are at the heart of the honor code and academic integrity. If you have any questions about your responsibilities under the honour code, please ask.