



APPLIES TO ACADEMIC YEAR 2008/2009

## EXC 2707 Risk Management with Derivatives

### Program

Bachelor in Arts and Management (3. year)

### Responsible for the course

Barbara Bukhvalova

### Department

### Term

According to study plan

### ECTS Credits

6

### Language of instruction

English

Due to the growing popularity of both financial derivative instruments as well as broadening understanding of importance of real options in general business applications, a basic understanding of intuition of derivative markets is essential not only to students and specialists in finance, but also to general business practitioners.

### Objective

To familiarize students with intuition of valuation of financial instruments whose value is determined by the valuation of some other market-traded assets. Sharing in this characteristic, options and futures are referred to as derivative assets. The introduction to option and futures markets aims to provide intuition needed to understand the arbitrage free valuation of contingent claims. Intuition of importance of financial derivatives valuation is then extended to show importance of real options in general business practices.

### Prerequisites

EXC 2300 Basic Financial Management, EXC 2501 Financial Decision Making, and EXC 2505 Empirical Methods in Finance.

### Compulsory literature

#### Books:

McDonald, Robert L. 2006. Derivatives markets. 2nd ed. Boston, Mass.: Addison Wesley

### Recommended literature

#### Books:

Hull, John C. 2008. Fundamentals of futures and options markets. 6th ed. Upper Saddle River, N.J.: Pearson/Prentice Hall

### Course outline

1. Introduction, Basics of Stock Option Pricing
2. Basic Option Strategies, Combinations and Spreads
3. Option Pricing: Black-Scholes Option Pricing Model
4. The Option Greeks
5. The Futures Market
6. Stock Index Futures
7. Foreign Exchange Futures
8. Real Options

### Computer-based tools

Excel

### Course structure

36 hours of class-room teaching (12 lectures) in addition to 6 hours of tutoring related to assigned exercise problems. Exercises highlighting and demonstrating often-used, practical applications managing risk with derivative instruments will be used extensively in class.

Completion of mandatory home assignments are required in order to register for the final exam. Late submissions of home assignments are associated with a reduction in the overall grade.

### **Evaluation**

The course grade will be based on the following activities and weights:

Part 1 - Class Participation (in the form of a mix of some/all of the following: hand in of case write ups, projects, and homework; case presentations and class participation; in class midterm and quizzes), accounts for 5% of final grade.

Part 2 - Three hour individual written exam, accounts for 95% of final grade.

Both parts of the evaluation need to be passed in order to get a grade in the course.

Specific Information regarding any aspect of student evaluation will be provided in class. It is the student's responsibility to obtain this information. Please note that whilst attendance is not compulsory, it is the student's responsibility to obtain any information provided in class that is not included on the course homepage/Blackboard or text book. Homepages and/or Blackboard are not designed for the purpose of students who choose not to attend class.

### **Evaluation code(s)**

EXC 27071 - Process evaluation, which accounts for 100% of the grade in EXC 2707 Risk Management with Derivatives, 6 ECTS credits.

### **Aids at the examination**

BI-approved exam calculator and interest rate tables.

Exam aids at written examinations are explained under exam information in our web-based Student handbook. Please note use of calculator and dictionary.

<http://www.bi.edu/studenthandbook/examaids>

### **Makeup exam**

A re-sit is held in at the next scheduled exam in the course. Students who are taking a new exam must take the course all over including all parts of evaluation.