APPLIES TO ACADEMIC YEAR 2004/2005

GRA 6535 Derivatives

Program
Advanced Specialization Course (MSc), Master of Science in Business, Master of Science in Business (Finance), Master of Science in Management, Master of Science (Financial Economics)

Responsible for the course
Bernt Arne Ødegaard

Department
Financial Economics

Term
According to study plan

ECTS Credits
6

Objective
A thorough understanding of the workings and pricing of deriviative securities.

Prerequisites
GRA 6533 Financial Theory and GRA 6532 Introduction to Derivatives and Risk management

Compulsory literature
Hull, John C. 2003. *Options, futures and other derivatives* . 5th ed. Upper saddle river, NJ: Prentice-Hall.

Recommended literature
None

Course outline
1. Derivative Payoffs
2. Derivative combinations
3. Arbitrage bounds
4. The binomial model and its continous time limit.
5. The mathematics of continous time (heuristically).
6. The Black Scholes model.
7. Adjusting the Black Scholes and binomial to price futures and currency options.
8. Delta hedging
9. The basics of the term structure of interest rates.
10. Modelling the evolution of the term structure of interest rates.
11. Fixed income derivatives.
12. Credit derivatives.
13. Exotic derivatives.

Computer-based tools
Will be used in addition to Blackboard/homepage

Course structure
Lectures, 36 hours

Evaluation
Your course grade will be based on the following activities and weights:
Specific information regarding any aspect of student evaluation will be provided in class. It is the studen's responsibility to obtain this information. Please note that whilst attendance is not compulsory, it is the students 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.

75% of the evaluation is based on a 3 hour exam at the end of the course. The remainder 25% is based on class work (in the form of a mix of some / all of the following: hand in of case write ups, projects and homeworks; case presentations and class participation; in class midterm and quizzes) Information regarding any aspect of student evaluation will be provided in class. It is the students responsibility to obtain this information.

Evaluation code(s)
GRA 65353 accounts for 100 % of the final grade in the course GRA 6535.

Aids at the examination
Financial Calculator, Interest Rate Tables, Berck and Sydsæter, Economists' mathematical manual, in Norwegian or English. Bilingual dictionary.

Makeup exam
Next time the course is offered