



APPLIES TO ACADEMIC YEAR 2005/2006

GRA 6535 Derivatives

Program

Advanced Specialization Course (MSc), Master of Science in Business, Master of Science in Business and Economics, 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 derivative securities.

Prerequisites

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

Compulsory literature

Books:

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

Recommended literature

Course outline

1. Derivative Payoffs
2. Derivative combinations
3. Arbitrage bounds
4. The binomial model and its continuous time limit.
5. The mathematics of continuous 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 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.

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

Re-takes are only possible at the next time a course will be held. When course evaluation consists of class participation or process elements, the whole course must be re-evaluated when a student wants to retake a exam. Retake examinations entail an extra examination fee.