HUMBOLDT-UNIVERSITÄT ZU BERLIN

Financial Engineering, Sommersemester 2012

VL: Thu 08:30 – 10:00, Room 203

ÜB: Thu 10:15 – 11:45, Room 203

Overview

This course introduces students to one of the most important and technically challenging areas in finance: derivative securities. The securities we cover include futures and forward contracts, options, swaps and exotic derivatives. We will examine the uses as well as the pricing of derivatives. Particular emphasis will be given to the Black-Scholes model and the binomial option-pricing model. Finally, there will be a discussion about credit derivatives and asset-backed securities.

Prerequisites

It is recommended to hear *Portfolio and Capital Market Theory* before hearing *Derivatives Securities*.

Team

Instructor	Dr. Tobias Berg / Valentin Burg Office hours: TBA
Teaching assistant	Valentin Burg (Email: valentin.burg@wiwi.hu-berlin.de) Office hours: TBA, Dorotheenstr.1, Room 303

Course Textbook

Derivatives Markets (DM), by Robert McDonald, Addison Wesley, 2006, 2nd edition

Lecture slides and additional teaching materials can be downloaded from Moodle.

Evaluation

Final exam (100%)

Preliminary Course Schedule

#	Date	Topic	Textbook (DM)
1	Apr 12	Forwards and futures	Ch. 5 & 6
2	Apr 19	Interest rate forwards	Ch. 7
3	Apr 26	Swaps	Ch. 8
4	May 3	Option Parities	Ch. 9
5	May 10	Binomial Option Pricing I	Ch. 10
6	May 17	*Ascension Day – no lecture*	-
7	May 24	Binomial Option Pricing II	Ch. 11
8	May 31	The Lognormal Distribution	Ch. 18
9	Jun 7	The Black-Scholes Model	Ch. 12
10	Jun 14	Implied Volatility & Delta-Hedging	Ch. 12.5, 13 & 23
11	Jun 21	Exotic Options	Ch. 14
12	Jun 28	Company presentation Deutsche Bank (TBC)	-
13	Jul 5	Credit Derivatives	Ch. 26
14	Jul 12	Asset-backed Securities	