



## FIN3116: Options and Futures Semester 2 – Course Syllabus 2014/15

**Instructor:** Jungwon Suh

**Email:** jungwonsuh@skku.edu

**Tel:** TBA

**Class time:** 11:00 am–2:00 pm on Mondays

**Venue:** BIZ1 2-2

### **Description:**

This course will introduce a range of derivative contracts including futures, options, swaps and credit derivatives. We will learn how these contracts can be used or different strategies can be formulated for investment and risk management purposes. We also will explore how one can determine the value of derivatives contracts using tools such as Binomial tree and the Black-Scholes-Merton pricing formula. We will see that many of the concepts and tools from this course can be applied to understanding and managing credit risk and also to valuing bonds with option features (e.g., callable bonds) and hybrid securities (e.g. convertible bonds).

### **Class Format**

Classes will be conducted in a lecture format. All lecture notes and announcements will be available on IVLE.

### **Homework Assignments**

Due dates will be indicated in the assignments. Late submissions will **NOT** be accepted

### **Required Textbook**

Hull, John. C., *Options, Futures and Other Derivatives, 8<sup>th</sup> Edition*. Pearson, 2012.

### **References**

Chance, Don M. and Robert Brooks, *An Introduction to Derivatives and Risk Management, 8th Edition*. Cengage Learning, 2010.

### **Course Assessment**

Class Participation:	10%
Quizzes (date to be announced):	30%
Homework:	20%
Closed-Book Test:	40%

## Class Schedule

Week	Date	Textbook Chapters & Important Dates
1	Jan 12	Ch1. Introduction Ch2. Mechanics of Futures Markets
2	Jan 19	Ch3. Hedging Strategies using Futures Ch4: Interest rates
3	Jan 26	Ch5: Determination of forward and futures prices Ch6: Interest rate futures
4	Feb 2	Ch7: Swaps Ch8: Securitization and the credit crisis of 2007
5	Feb 9	Ch9: Mechanics of options markets Ch10: Properties of stock options
6	Feb 16	Ch11: Trading strategies involving options
7	Mar 2	Ch12: Binomial trees
8	Mar 9	Ch13: Wiener processes and Ito's lemma
9	Mar 16	Ch14: The Black-Scholes-Merton model
10	Mar 23	Ch18: The Greek letters Ch19: Volatility smiles
11	Mar 30	Ch20: Basic numerical procedures
12	Apr 6	Ch23: Credit risk Ch24: Credit derivatives
13	Apr 13	Special Topics: Callable bonds and convertible bonds
-		<b>Test</b>