FE 542: Advanced Financial Time Series Analysis
Fall 2013, 2nd Half 8-Week Session

Time:	Friday 1:00 pm – 4:00 pm
Place:	Chey Jong Hyun Hall
Instructor:	Kun Ho Kim
E-Mail:	kunhokim8@gmail.com
Office Hours:	After class or by appointment
Required Textbook:	*Introductory Econometrics for Finance* 2nd Edition by Chris Brooks
References:	*Time Series Analysis* 1st Edition by James D. Hamilton
	Analysis of Financial Time Series 3rd Edition by Ruey S. Tsay

FE 542 introduces students an advanced level of financial time series analysis. In comparison to general time series courses, the course is intended to cover topics more relevant to the area of finance. The emphasis in the course will be also on hands-on experience of using course material to analyze real world data. In particular, developing skills essential to empirical analysis of various data should be the main goal of the course.

The specific topics of the course include: maximum likelihood estimation, generalized method of moments, vector autoregressive model, impulse response analysis, co-integration, Bayesian vector autoregressive model, autoregressive conditional heteroskedastic (ARCH) process and generalized ARCH (GARCH) process.

There will be ***weekly*** homework assignments in this course. Students can collaborate with their classmates, but they should hand in their own writings. Late homeworks will NOT be accepted. There will be a final exam in this course. NO make-up exams will be provided in this class. The relative weighting is: homeworks 50% and final exam 50%.

Course Schedule:

Part 1. Maximum likelihood estimation, Generalized method of moments.

Part 2. Vector autoregressive model, Impulse response analysis.

Part 3. Co-integration.

Part 4. Bayesian vector autoregressive model.

Part 5. Autoregressive conditional heteroskedastic (ARCH) process.

Part 6. Generalized ARCH (GARCH) process.

Part 7. Contemporary issues in empirical finance (if time permits).

Important dates for Fall 2013, 2nd Half 8-Week Session

- Nov 8th, First day of class
- Nov 15th, Homework 1 due
- Nov 22nd, Homework 2 due
- Nov 29th, Homework 3 due
- Dec 6th, Homework 4 due
- Dec 13th, Homework 5 due
- Dec 20th, Final Exam, 1:00 pm–3:00 pm