FINN 6212-U90  
Advanced Derivatives  
Spring 2018

Professor: Dr. Steven P. Clark  
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Office Hours: By appointment  
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Textbook:  
*Derivatives Analytics with Python: Data Analysis, Models, Simulation, Calibration and Hedging*, by Yves Hilpisch, 2015

**About this Class**

This course provides students with the opportunity for an in-depth study of advanced derivatives pricing models. Topics include option pricing using Fourier transforms, valuation of American options by simulation, Levy process models of asset prices, stochastic volatility models, and dynamic hedging. The course also provides an opportunity for students to learn to use the computer language Python in computational finance.

**Academic Integrity**

I take academic dishonesty very seriously, and I expect you to do so as well. You are responsible for understanding the University’s policy regarding Academic Integrity. That policy can be found in the 2017-2018 Graduate Catalog.

**Electronic Communications**

All students at UNC-Charlotte are assigned a student email account, which is the official means of communication between the University and the student. Although I will certainly respond to you if you use another email system, you should be aware that any class-wide announcements that I send through email will be sent to your UNC-Charlotte account through the Canvas system.

**Grading Policies**

There will be one midterm exam and a final project. The midterm will count for 20% of your final grade, and the final project will count for 40% of your final grade. I will also assign homework periodically, most of which will involve Python programming exercises. These assignments will be graded and your average score on these will account for the remaining 40% of your grade. Each student submit a final paper summarizing their project and give a 10-15 minute presentation of their results to the class. These presentations will take place during the regularly scheduled final exam period for the course which is on Tuesday, May 8, 2018, 5:00 pm – 7:30 pm.

**Grading Scale**

The lower bounds for final grades of A, B, C will be no higher than 90, 80, and 70 percent of the total available points, respectively. Grades will be curved if necessary.

**Missed Tests**

Make up exams will only be administered if your absence is unavoidable. You must make me aware of any such unavoidable absences as soon as possible after you learn of them so that an alternative exam time can be set.

**Statement on Diversity**

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.