# UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE <br> DEPARTMENT OF MATHEMATICS AND STATISTICS MATHEMATICAL FINANCE PROGRAM MATH-6203 STOCHASTIC CALCULUS FOR FINANCE 

## SYLLABUS -- FALL 2011

Professor: Dr. Jaya Bishwal
E-mail: J.Bishwal@uncc.edu
Phone: 704-687-2566
Office: FRETWELL 345B
Class Location: Fretwell 306
Class Time : Mon, Wed 11:00am -12:15pm
Office Hours: Mon, Wed 5:00-6:30 pm or by appointment
Webpage: http://math.uncc.edu/-jpbishwa
Click Teaching button on my webpage to see syllabus and homework assignments.
TEXTBOOK: Stochastic Calculus for Finance I \& II by Steven Shreve, Springer-Verlag, 2004.
Vol I: ISBN 0-387-40100-8, Vol II: ISBN 0-387-40101-6
These books are available in UNCC bookstore.
References: Stochastic Differential Equations, Berndt Oksendal, Springer-Verlag, 2003. Arbitrage Theory in Continuous Time, Thomas Bjork, Oxford University Press, 1998. Mathematical Methods of Financial Markets, Monique Jeanblanc, Marc Yor, Marc Chesney, Springer-Verlag, 2009.

## CONTENTS

Vol I Chapters: 1, 2, 3 Vol II Chapters: 3, 4, 5, 7, 8, 10

## HOMEWORK

Homework assignments will be posted on my webpage.

## COURSE REQUIREMENTS

Your class grade will consist of a set of homework assignments, two tests and one final exam. There is no curve. The final grade will consist of the following:

| Homework | $20 \%$ | Homework assignments will be assigned every week. <br> You have to see my webpage for homework <br> assignments. |
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| Test I (Oct 3, 11 am-12:15 pm) | $25 \%$ | Test I will be based on the material covered up to the <br> week before Test I. |
| Test II (Nov 16, 11am-12:15 pm) | $25 \%$ | Test II will be based on the material covered up to <br> the week before Test II. |
| Final (Dec 12, 11am-1:30 pm) | $30 \%$ | The final examination will be on the material covered <br> in the entire course. |

## TEST SCORES

I will return the tests in the class following the examination. If you fail to collect your paper at this time, please collect it from me during my office hours.

GRADING There is no curve.
90\%-100\%: A, 80\%-90\%: B, 70\%-80\%: C, 0\%-70\%: F.

