The TA for the course is Mr Vidal Alcala <alcala@cims.nyu.edu>

He will run the problem session on Thursdays 5.30 to 6.30 in room 813. The first problem session will be next week Sept 11, 2008. The problem session will not meet this Thursday (Sept 4, 2008).

We will not have a specific textbook. I shall put on the web notes for the course. I will try to put it up before I cover the material in class so it can be available for you at the time of the lecture.

I will assign problems on a regular basis and I am planning to have them graded. The final grade for the course will depend on the work turned in.

There will probably be take home final at the end of the semester.

The Library has list of reserve books.

1) Breiman, Leo.
   Probability. – Reading, Mass., Addison-Wesley Pub. Co. [1968]
   (Addison-Wesley series in statistics)

2) Avellaneda, Marco, 1955-
   Quantitative modeling of derivative securities : from theory to practice
   Marco Avellaneda in collaboration with Peter Laurence. –
   Boca Raton, Fla. : Chapman & Hall, 1999.

3) Shreve, Steven E
   Stochastic calculus for finance
   New York : Springer, c2004-
   (Springer finance)

4) McKean, Henry P.
   Stochastic integrals [by] H. P. McKean, Jr. –
   New York, Academic Press, 1969.
   (Probability and mathematical statistics; a series of monographs
   and textbooks)

5) Friedman, Avner.
   Stochastic differential equations and applications
   New York : Academic Press, 1975-1976.
   2 v. (Probability and mathematical statistics series ; v. 28)

6) Ikeda, Nobuyuki-Watanabe, Shinzo

Stochastic differential equations and diffusion processes –
Amsterdam ;New York : North-Holland Pub. Co. ;
Tokyo : Kodansha ; New York, NY, U.S.A.
Sole distributors for the U.S.A. and Canada, Elsevier Science Pub. Co.,1989.
(Kodansha scientific books)
(North-Holland mathematical library ; v. 24)

7) Steele, J. Michael.
Stochastic calculus and financial applications
New York : Springer, c2001.
(Applications of mathematics ; 45)

8) Durrett, Richard, 1951-
Stochastic calculus : a practical introduction
Boca Raton, Fla. : CRC Press, 1996.
(Probability and stochastics series)

9) Varadhan, S. R. S Stochastic processes / S.R.S. Varadhan. –
New York, N.Y. : Courant Institute of Mathematical Sciences;
Providence, R.I. : American Mathematical Society, c2007.
(Courant lecture notes in mathematics ; 16)

10) Varadhan, S. R. S.
Probability theory
New York : Courant Institute of Mathematical Sciences ;
Providence, R.I. : American Mathematical Society, c2001.
(Courant lecture notes in mathematics ; 7)

Items 4), 5) & 6) are more advanced. Items 1) & 10) will help review of some of the elementary material. 9) contains a major part of what we will cover, as will 2), 3), 7) & 8).