MATH674 — SPRING 2020

Stochastic Differential Equations

Instructor::	Dr. Harbir Lamba
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Office:	Exploratory Hall, Room 4459
Office Hours:	M 12.30–1.30 and W 3.00–4.00 and by appointment. There will also (sometimes) be office hours on Fridays but with times changing weekly. Check the webpage for details.
Webpage:	http://math.gmu.edu/∼harbir/m674
MATLAB links:	https://its.gmu.edu/service/virtual-computing-lab
OCTAVE links:	http://www.octave.org
Textbook:	J. Michael Steele, *Stochastic Calculus and Financial Applications*, Springer-Verlag, 2000.
The Course:	Introduction to stochastic calculus and SDEs with financial applications/motivations. We will attempt to cover all of the chapters in the book to some level.

The course will be graded on the basis of a midterm exam (March 18th), a (cumulative) final exam (May 6th) and two numerical projects that will be set during the term (dates to be announced). The midterm and the two projects will each be worth 20%. The final exam will be worth 40% of the marks. No outside materials will be allowed during the exams and no collaboration will be allowed on the projects.

In addition there will be homework problems set at the end of each class. These should not be handed in but you are STRONGLY advised to study them and write out your solutions properly. You are also encouraged to discuss these problems amongst yourselves and make use of the office hours. I will go through many of the homework problems in the following class and you will not benefit from this if you have not made a serious attempt at them beforehand.