Stochastic Differential Equations — MAP 4215

Fall 2019

Instructor: Xiaosheng Li

Lecture Time and Location: MWF 11:00am – 11:50am   AHC5 212A/212B

Office Hour: MWF 12:10pm – 12:50pm or by appointment

Office: DM 419C

Email: xli@fiu.edu

Textbook:

An Introduction to Stochastic Differential Equations by Lawrence C. Evans

https://bookstore.ams.org/mbk-82

Course Objective: This course is intended to be an introduction to the fundamental theories and important applications of stochastic differential equations. Topics include stochastic calculus, stochastic differential equations and applications.

Course Plan: Chapters 1, 2, 3, 4, 5, 6

Prerequisite:

Grade C or better in MAP2302, MAC2313, MAS3105, and STA4321

Exam Schedule:

Midterm I :	September 27 (Friday),	11:00am – 11:50am
Midterm II :	November 1 (Friday),	11:00am – 11:50am
Final:	TBD, **Cumulative**	

Grading Policy:

Homework:	35%
Midterm I	15%
Midterm II:	15%
Final:	35%

Letter grades will be assigned approximately as follows (Total=100):

A	A-	B+	B	B-	C+	C	D	F
>= 90	>= 85	>= 80	>= 75	>= 70	>= 65	>= 60	>= 45	< 45

Homeworks:

- Homework 1 (due September 18, Wednesday): 2, 3, 4, 6, 7

- Homework 2 (due October 2, Wednesday): 8, 10, 12, 15, 16, 19

- Homework 3 (due October 16, Wednesday): 20, 21, 23, 24, 25

- Homework 4 (due October 30, Wednesday): 27, 31, 32, 33, 35

- Homework 5 (due November 13, Wednesday): 36, 37, 38, 39, 43, 44

- Homework 6 (due December 4, Wednesday): 46, 47, 48, 49, 50, 51

Important:
- No make ups are permitted. Please consult your calendar to be sure that you can take all exams.
- All exams are closed books. But a piece of notes (8.5×11 inches, one side) will be allowed on exams, along with a scientific (but not graphing) calculator.
- Homework due at the beginning of the class of the due dates. Late homework will not be accepted.
- Picture ID is required and must be presented upon request for all exams.
- Deadline to drop a course with a DR grade: November 4 (Monday).

The instructor reserves the right to make changes to this syllabus. These eventual changes, if any, would be announced in class and you are responsible to be aware of them.