Anno Accademico 2016/2017

STOCHASTIC PROCESSES	
Enrollment year	2015/2016
Academic year	2016/2017
Regulations	DM270
Academic discipline	MAT/06 (PROBABILITY AND MATHEMATICAL STATISTICS)
Department	DEPARTMENT OF MATHEMATICS "FELICE CASORATI"
Course	MATHEMATICS
Curriculum	PERCORSO COMUNE
Year of study	2°
Period	2nd semester (01/03/2017 - 09/06/2017)
ECTS	6
Lesson hours	48 lesson hours
Language	ITALIAN
Activity type	ORAL TEST
Teacher	RIGO PIETRO (titolare) - 6 ECTS
Prerequisites	The course "Probability" of the Laurea Magistrale. As a consequence, "Stochastic Processes" is not suggested to students of the Laurea Triennale.
Learning outcomes	This course is the natural continuation of "Probability" (Laurea Magistrale). The characteristic arguments are Markov chains and Itô calculus.
Course contents	1. General notions about stochastic processes;
	2. Continuous time martingales;
	3. Markov chains;
	4. Brownian motion and Poisson process;

	5. Ito calculus and stochastic differential equations.
Teaching methods	Lessons. (Exercises will be also discussed during such lessons).
Reccomended or required readings	1. Z. Brzezniak, T. Zastawniak: Basic stochastic processes-a course through exercises (Springer) 2. A. Shiryaev: Probability (Springer) 3. Notes given by the teachter
Assessment methods	Oral examination.
Further information	None.
Sustainable development goals - Agenda 2030	$lbl_legenda_sviluppo_sostenibile