

COURSE: SIMULATION IN PROBABILITY AND STATISTICS

DEGREE: APPLIED MATHEMATICS AND COMPUTING

YEAR: 4

TERM: 2

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	TEACHING (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	WEEKLY PROGRAMMING FOR STUDENT		
			L E C T U R E S	S E M I N A R S		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 3,25h)
1	1	Randon numbers			Comp. Lab		1,66	3,25
2	2	Monte Carlo Integration			Comp. Lab		1,66	3,25
3	3	Simulation of random variables (discrete)			Comp. Lab		1,66	3,25
4	4	Simulation of random variables (continuous)			Comp. Lab		1,66	3,25
5	5	Simulation of random vectors			Comp. Lab		1,66	3,25
6	6	Simulation of stochastic processes			Comp. Lab		1,66	3,25
7	7	Discrete event simulation			Comp. Lab		1,66	3,25
8	8	Variance reduction techniques I			Comp. Lab		1,66	3,25
9	9	Variance reduction techniques II			Comp. Lab		1,66	3,25
10	10	Monte Carlo Markov Chains I			Comp. Lab		1,66	3,25
11	11	Monte Carlo Markov Chains II			Comp. Lab		1,66	3,25
12	12	Introduction to the bootstrap			Comp. Lab		1,66	3,25
13	13	Parametric bootstrap			Comp. Lab		1,66	3,25
14	14	Bootstrap-based inference			Comp. Lab		1,66	3,25
	15	Additional session					1,66	3,25

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			L E C T U R E S	S E M I N A R S		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 3,25h)
Subtotal 1						25	49	
Total 1 (Hours of class plus student homework)						74		
15		Tutorials, handing in, etc					1,8	-
16		Assessment					4	4
17								
18								
Subtotal 2						6	4	
Total 2 (Hours of class plus student homework)						10		
TOTAL (<i>Maximun 83 horas</i>)						83		