Universidad Carlos III de Madrid
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COURSE: STATISTICS		
DEGREE: BACHERLOR IN BIOMEDICAL ENGINEERING	YEAR: 2	TERM: 1

La asignatura tiene 29 sesiones que se distribuyen a lo largo de 14 semanas. Los laboratorios pueden situarse en cualquiera de ellas. Semanalmente el alumnos tendrá dos sesiones, excepto en un caso que serán tres

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	Indicate YES/NO If the session needs 2 teachers	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS			DESCRIPTION	CLASS HOURS	HOMEWOR HOURS (Max. 7h week)
1	1	Presentation, introduction to Probability	X				Study the main operations with events and their properties	1,67	2,5 + 2,5
1	2	Probability problems I		X			Solve elementary probability problems	1,67	
2	3	Conditional Probability and Bayes Theorem	X				Study Laplace rule, definition of conditional probability, and Bayes Theorem	1,67	2,5 + 2,5
2	4	Probability problems II		X			Solve probability problems by means of the total probability rule and the Bayes Theorem	1,67	
3	5	Introduction to random variables	X				Understand the concept of random variable	1,67	2,5 + 2,5
3	6	Problems on random variables		X			Solve problems alike to the ones solved during the lecture	1,67	

4	7	Continuous random variables and transformations	X				Solve problems on transformations of random variables	1,67	2,5
4	8	Problems on random variables		X			Solve problems alike to the ones solved during the lecture	1,67	+ 2,5
5	9	Discrete probability models	X				Study the probability models from the lecture	1,67	2,5
5	10	Computer laboratory: introduction and descriptive statistics		X	X		Laboratory assignment	1,67	+ 5,5
6	11	Continuous probability models	X				Study the probability models from the lecture	1,67	2,5
6	12	Problems on continuous probability models		X			Solve problems alike to the ones solved during the lecture	1,67	+ 2,5
7	13	Central Limit Theorem and approximations	X				Study the CLT and approximations	1,67	2,5
7	14	Computer laboratory: probability models		X	X		Laboratory assignment	1,67	+ 2,5
8	15	Continuous evaoluation	X				Study for continuous evaluation	1,67	9
8	16	Problems on estimators		X			Solve problems on estimators	1,67	+ 2,5
9	17	Maximum Likelihood Estimation	X				Find Maximum Likelihood Estimators	1,67	2,5
9	18	Problems on Maximum Likelihood Estimation		X			Find Maximum Likelihood Estimators	1,67	+ 5,5
10	19	Confidence Intervals and hypothesis tests	X				Study statistical inference	1,67	2,5
10	20	Test hypothesis		X			Solve tests	1,67	+ 2,5
11	21	Hypothesis tests	X				Solve tests	1,67	2,5
11	22	Computer laboratory: inference		X	X		Laboratory assignment	1,67	+ 2,5
12	23	Simple linear regression	X				Study simple linear regression	1,67	2,5
12	24	Problems on simple linear regression		X			Solve problems on simple linear regression	1,67	+ 5,5
13	25	Multiple linear regression	X				Study multilpe linear regression	1,67	2,5
13	26	Problems on multiple linear regression		X			Solve problems on simple linear regression	1,67	+ 2,5
14	27	Continuous evaluation	X				Study for continuous evaluation	1,67	9
14	28	Computer laboratory: linear regression and ANOVA		X	X		Laboratory assignment	1,67	+ 5,5
8	29	Sampling and distributions at sampling	X				Study the most relevant estimators	1,67	2,5
							Subtotal 1	**48,33**	**97,5**

							Total 1 *(Hours of class plus student homework hours between weeks 1-14)*	145,83	
15		Tutorials, handing in, etc						6,5	
16		Assessment						3	15
17									
18									
							Subtotal 2	**3**	**18**
							Total 2 *(Hours of class plus student homework hours between weeks 15-18)*	24,5	
TOTAL *(Total 1 + Total 2. Maximum 180 hours)*									