uc3m | Universidad Carlos III de Madrid
Vicerrectorado de Estudios
Apoyo a la docencia y gestión del grado

COURSE: INTRODUCTION TO STATISTICAL MODELING		
DEGREE: DATA SCIENCE AND ENGINEERING	YEAR: 1	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		
			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
1	1	T1. Theory. Presentation. Random sampling and sampling distributions	X			Study the main contents of topic 1.	1.66	6.5
	2	T1. Sampling distributions problems		X		Solve problems alike to the ones solved furing the lecture.	1.66	
2	3	T1. Theory. Point estimation of parameters	X			Study the main point estimation techniques.	1.66	6.5
	4	T1. Point estimation problems		X		Solve problems alike to the ones solved during the lecture.	1.66	
3	5	T2. Theory. Introduction to CI. CI on mean.	X			Study CI on the mean	1.66	6.5
	6	T2. CI on mean problems		X		Solve problems alike to the ones solved during the lecture.	1.66	
4	7	T2. Theory. CI proportion and varianze	X			Study CI on the proportion and variance	1.66	6.5
	8	T2. CI on proportion and variance problems.		X		Solve problems alike to the ones solved during the lecture.	1.66	
5	9	T3. Theory. Hyphotesis test. Introduction.	X			Study the theoretical basis for hyphotesis testing	1.66	6.5
	10	Computer Laboratory I: Point estimation and CI		X	X	Laboratory assignment	1.66	
6	11	T3. Theory. HT on mean.	X			Study HT for the mean	1.66	6.5
	12	T3. HT on mean problems		X		Solve problems alike to the ones solved during the lecture.	1.66	
7	13	T3. Theory. HT on the proportion and variance.	X			Study HT on the proportion and variance.	1.66	6.5
	14	T3. HT on proportion and variance problems.		X		Solve problems alike to the ones solved during the lecture.	1.66	
8	15	Continuous evaluation.	X			Study for continuous evaluation	1.66	6.5
	16	Computer Laboratory II: Hyphotesis testing		X	X	Laboratory assignment	1.66	
9	17	T4. Theory. Introduction SI for two samples. CI and HT difference in means.	X			Study CI and HT comparing two populations means	1.66	6.5
	18	T4. SI for two samples problems.		X		Solve problems alike to the ones solved during the lecture	1.66	
10	19	T4. Theory. CI and HI difference in proportions and ratio of the variances.	X			Study CI and HT comparing two populations proportions and variance	1.66	6.5
	20	Computer Laboratory III: Inference for two samples		X	X	Laboratory assignment	1.66	
11	21	T5. Theory. One-way ANOVA.	X			Study the theory for one-way ANOVA	1.66	6.5
	22	T5. One-way ANOVA problems.		X		Solve problems alike to the ones solved during the lecture	1.66	
12	23	T5. Theory. Two-way ANOVA.	X			Study the theory for two-way ANOVA	1.66	6.5
	24	T5. Problems two-way ANOVA + Introductio to T6. Goodness of fit test.		X		Solve problems alike to the ones solved during the lecture	1.66	
13	25	T6. Theory. Goodness of fit tests.	X			Study goodness of fit tests	1.66	6.5
	26	T6. Goodness of fit problems		X		Solve problems alike to the ones solved during the lecture	1.66	
14	27	Continuous evaluation	X			Study for continuous evaluation	1.66	6.5
	28	Computer Laboratory IV: ANOVA and Goodness of fit tests		X	X	Laboratory assignment	1.66	
	29	T4. Problems for SI two samples.		X		Solve problems alike to the ones solved during the lecture	1.66	3.25
						Subtotal 1	**48**	**94**
						Total 1 *(Hours of class plus student homework)*	**142**	

15		Tutorials, handing in, etc					3.6	-
16								
17		Assessment					4	10
18								
						Subtotal 2	**8**	**10**
						Total 2 *(Hours of class plus student homework)*	**18**	

TOTAL (*Maximun 160 horas*)	**160**