

SUBJECT DENOMINATION: Techniques of Statistical Inference I
DEGREE: Statistics and Business

CURSO: 2

CUATRIMESTRE: 1

CRONOGRAMA DE LA ASIGNATURA

WEEK	SESSION	DESCRIPTIONS OF THE CONTENTS IN EACH SESSION	GROUP (Marcar X)		Point out the space needed (classroom, audiovisual, etc)	STUDENT WORK DURING THE WEEK		
			BIG	SMALL		DESCRIPTION	CLASS HOURS	WORKING HOURS PER WEEK (Max 7 H)
1	1	Course presentation. Chapter 0: review of probabilistic concepts and random variables.		X		Working in groups any family of random variables.	1,5	7
1	2	Chapter 1: Basic notions of statistical inference.. Point parametric estimation. Estimators. Sampling distributions of estimators. Random simple sample. .		X		Worksheet 1. Read the outline of the first empiric project. Can I build an estimator?.	1,5	
2	3	Chapter 1: Basic notions of statistical inference.. Sampling from the normal distribution.		X		Working on the class material. Worksheet 1.	1,5	7
2	4	Chapter 1: Basic notions of statistical inference.. Problems resolution. Worksheet 1.		X		Working on the class material. Deadline of the first part of the Project 1.	1,5	
3	5	Chapter 2. Estimator Properties. Unbiasedness. .Efficiency		X		Working on the class material. Worksheet 1.	1,5	7
3	6	Chapter 2. Estimator Properties. Consistency . invariance, robustness, sufficiency		x		Working on the class material. Worksheet 2. Read the outline of the second part of the first empiric project. : Can I build an estimator? Is my estimator a good one?	1,5	
4	7	Chapter 2. Estimator Properties. Problems resolution. Worksheet 2.		x		Working on the class material. Worksheet 2.	1,5	7
4	8	Chapter 2. Estimator Properties. Problems resolution. Worksheet 2.		X		Working on the class material. Worksheet 2.	1,5	
5	9	Chapter 3: Methods for obtaining estimators. Maximum likelihood method.		X		Working on the class material. Worksheet 3.	1,5	7
5	10	Chapter 3: Methods for obtaining estimators. Properties of the maximum likelihood estimator. Method of moments		X		Working on the class material. Worksheet 3.	1,5	
6	11	Chapter 3: Methods for obtaining estimators.. Problem resolution. Worksheet 3.		X		Working on the class material.	1,5	7

6	12	Chapter 3: Methods for obtaining estimators.. Problems resolution. Worksheet 3.		X		Working on the class material. Deadline for the second part of the empiric project.	1,5	
7	13	Chapter 4: resampling techniques. Jackknife. Quiz.		X		Working on the class material. Worksheet 5.	1,5	7
7	14	Chapter 4: resampling techniques. Bootstrap		X		Working on the class material. Read the outline of the third part of the empiric Project.	1,5	
8	15	Chapter 5: Bayesian statistics. Motivation. A priori distributions, likelihood function and a posteriori distribution.		X		Working on the class material. Worksheet 5.	1,5	7
8	16	Chapter 5: Bayesian statistics.. Risk and bayes estimator.		X		Working on the class material. Worksheet 5	1,5	
9	17	Chapter 5: Bayesian statistics.. Conjugate families.		X		Working on the class material. Worksheet 5.	1,5	7
9	18	Chapter 5: Bayesian statistics.. Problem resolution. Worksheet 5.		X		Working on the class material. Worksheet 5.	1,5	
10	19	Chapter 6: Sampling from two normal distributions. Sampling distributions for independent normal distributions.		X		Working on the class material. Worksheet 6. Deadline for the third part of the empiric Project..	1,5	7
10	20	Chapter 6: Sampling from two normal distributions Sampling distributions for dependent normal distributions.		X		Working on the class material. Worksheet 6.	1,5	
11	21	Chapter 7: Confidence intervals Motivation. Definition Method of the pivotal quantity.		X		Working on6.	1,5	7
11	22	Chapter 7: Confidence intervals Confidence intervals for normal distributions..		X		Working on the class material. Worksheet 6.	1,5	
12	23	Chapter 7: Confidence intervals Confidence intervals for big samples. Confidences intervals based on the likelihood estimator.		X		Working on the class material. Worksheet 6.	1,5	7
12	24	Chapter 7: Confidence intervals Computational exercises.		X	Aula informática	Pick up the take home	1,5	
13	25	Chapter 7: Confidence intervals Computational exercises.		X	Aulas informáticas	Working on the class material. Worksheet 6 s.	1,5	7
13	26	Chapter 7: Confidence intervals . Problem resolution.		X	.	Working on take home	1,5	
14	27	Oral presentation of projects.		x			1,5	7

14	28	Oral presentation of projects.		x		Working on take home	1,5	
SUBTOTAL							42	+ 68 = 110
15		Recuperaciones, tutorías, entrega de trabajos, etc					3	
16-18		Preparación de evaluación .				Deadline for the take home..	3	
TOTAL								