Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
SOC271	Statıstıcs and İnformatic Analysıs	3	3	0	0	3	5

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	Course objective is to give to the student the basic knowledge about, 1) Descriptive statistics (representation of datas, charts, measures of central tendency and dispersion). 2) Probability and probability laws (law of sum and product of probabilities, conditional probability) 3) Theoretical probability distributions for discret and continuous random variables (binomial, Poisson, hypergeometric, Gaussian and Student (t) probability distributions). 4) Statistical inference and estimation theory (estimation of a mean, a proportion, estimation by confidence inteval). 5) Sampling, the methods of sampling and data collection as well as the size of the sample to be used for the research project.
Content	1) Introduction to statistics, steps of a research project, organization of datas and data analysis. 2) Organization of datas and data analysis, frequency distribution. 3) Graphic representation of frequency distributions. 4) Descriptive measures of central tendancy and dispersion of distributions. 5) Probability and laws of probability. 6) Elementary laws of probability for discrete variables. 7) Elementary laws of probability for continuous variables. 8) Sample and population. Methods used in data collection and sampling. 9) Sampling and statistical inference (Estimation of a mean and proportion) 10) Determination of the sample size.
References	Calot, Gérard, Cours de Statistique Descriptive, Dunod, Paris Daniel Wayne W. & Terrell James C., Business Statistics, 5. edition, Houghton Miflin, USA. Newbold, Paul, Statistics for Business and Economics, Pearsons Education Newbold, Paul, İşletme ve İktisat için İstatistik, Çeviren Ümit Şenesen, Literatür Yayıncılık Orhunbilge, Prof. Dr. Neyran, Tanımsal İstatistik, Olasılık ve Olasılık Dağılımları, İ.Ü.İşletme Fak. Yayınları Avcıol Basım Yayın, İstanbul 2000 Orhunbilge, Prof. Dr. Neyran, Örnekleme Yöntemleri ve Hipotez Testleri, İ.Ü.İşletme Fak. Yayınları Avcıol Basım Yayın, 2. Baskı, İstanbul 2000. Baille, Alain et Van Kutsem, Philippe. Méthodes et modèles en statistique non-paramétrique. Dunod, Paris, 1988. Blum, Alain. Mathématiques et statistique appliqués aux sciences sociales. Bordas, Paris, 1991. Çakır, Filiz, Sosyal Bilimlerde İstatistik, Alfa Yayınları, 2000 Grais, Bernard. Exercices corrigés de statistique descriptive. Dunod, Paris, 1991. Jaffard, Paul. Initiation aux méthodes de la Statistique et du calcul de probabilité. Masson, Paris, 1996. Rouanet, Henry, Bernard, Jean-Marc et Le Roux, Brigtitte. Analyse de données - Statistique en Sciences Humaines. Dunod, Paris. 1990.

Theory Topics

Week	Weekly Contents
1	Introduction to statistics, steps of a research project, organization of datas and data analysis.
2	Organization of datas and data analysis, frequency distribution.
3	Graphic representation of frequency distributions.
4	Descriptive measures of central tendancy and dispersion of distributions.
5	Descriptive measures of central tendancy and dispersion of distributions.
6	Probability and laws of probability.
7	Elementary laws of probability for discrete variables.
8	Elementary laws of probability for continuous variables.
9	Elementary laws of probability for continuous variables.
10	Mid-term Exam.
11	Sample and population. Methods used in data collection and sampling.
12	Sampling and statistical inference (Estimation of a mean and proportion)
13	Sampling and statistical inference (Estimation of a mean and proportion)
14	Determination of the sample size.