Universidad Carlos III de Madrid

Data analysis in marketing

Academic Year: (2019 / 2020)   **Review date: 21/04/2019 16:34:31**

Department assigned to the subject: Statistics Department

Coordinating teacher: KAISER REMIRO, REGINA

Type: Compulsory ECTS Credits : 3.0

Year : 1 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Not required.

OBJECTIVES

Skills to be acquired

General skills
*CG2: Effective knowledge of other disciplines / techniques used in Marketing and Market Research.
*CG6: Ability to search and analyze information from different sources.

Specific skills:
*CE4: To learn the qualitative and quantitative tools for market research, to choose and apply the most appropriate technique to every problem, and understand the potential of computer tools in this area.
*CE5: To understand and use statistics and econometrics tools to analyze data and marketing problems through scientific models, using appropriate software.

Learning Objectives
¿ Understand the foundations of Statistics.
¿ Sampling from finite populations
¿ Apply fundamental principles and methods of Statistics to a wide range of problems.
¿ Design, correctly implement and document solutions to the "real-world" problems.

DESCRIPTION OF CONTENTS: PROGRAMME

Chapter 1.   Descriptive statistics for marketing analysis.
1.1 Introduction.
1.2 Types of marketing data.
1.3 Scalar measures.
1.4 Graphical displays. Sampling. SPSS examples.

Chapter 2. Inferential statistics.
2.1 Basic foundation of inferential statistics.
2.2 Point and interval estimation of population parameters.
2.3 Testing of hypotheses about population parameters.
2.4 Hypotheses about the differences among two populations. SPSS examples.

Chapter 3. Associative statistics.
3.1 Concept of association among two variables.
3.2 Types of relationships.
3.3 Cross tabulations and chi-square analysis.
3.4 Correlation. SPSS examples.

Chapter 4. Predictive statistics.
4.1 Basic concept of prediction and regression analysis.
4.2 Bivariate and multiple linear regressions.

4.3 Other models. SPSS examples

LEARNING ACTIVITIES AND METHODOLOGY

Classes may involve lectures, small group exercises, case analyses and discussions. The lectures will serve to establish the conceptual foundations. Practical classes are designed so that students can develop skills and abilities required properly established.

Student contributions are an important part of the course. Students are expected to read assigned materials for each class; attend class, participate and contribute to discussions.

ASSESSMENT SYSTEM

% end-of-term-examination/test: 40

% of continuous assessment (assigments, laboratory, practicals…):   60

Your final grade will be assigned based on:
Participation in-class, discussion, assignments, quizzes and cases studies: 60%
Final exam: 40%.
In order to pass the subject, students need to meet the minimum passing score of 4 points (out of a possible 10) in the final exam. Students that do not meet the minimum passing grade should retake the subject. If the resit is taken, the above grade criteria also apply.

BASIC BIBLIOGRAPHY

 - Devore, J.L., and N.R. Farnum Applied Statistics for Enginners and Scientist, 2nd Edition, Duxbury Press, , 2004

 - Lind, D. Marchal, W.G. and Wathen, S. Statistical Techniques in Business and Economics. 15th Edition., Irwin/McGraw-Hill, 2011

 - Siegel, A.F. Practical Business Statistics., Academic Press., 2011