COURSE DATA

Data Subject	
Code	40101
Name	Multivariant techniques in market research
Cycle	Master's degree
ECTS Credits	5.0
Academic year	2024 - 2025

Study (s)

Degree	Center	Acad. year	Period
2114 - Master's Degree in Marketing and Market Research	Faculty of Economics	1	First term

Subject-matter

Degree	Subject-matter	Character
2114 - Master's Degree in Marketing and Market Research	8 - Market strategic diagnosis in marketing planning	Obligatory

Coordination

Name	Department
GIL SAURA, ROBERTO	43 - Marketing and Market Research

SUMMARY

Market research is a central element in the understanding of the environment and the key to successful marketing planning. The data analysis tools constitute a basic support to underline the reality of our hypotheses or assumptions about how the market consumer behaves. The need to apply them with criteria, but also from a very applied perspective, justifies the follow-up of this subject.

The subject **Multivariable Techniques of Market Research** provides the student with an applied view of what analysis tools can be applied to deepen the knowledge of the market that led him to develop an investigation and how to apply them rigorously.

The **generic objective** of this subject is to know how to choose the appropriate analysis technique for each objective problem of market research pursued, apply it rigorously and know how to interpret and communicate their results.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

In relation to other subjects of the same degree, no enrollment restrictions have been specified with other subjects of the study plan. The previous knowledge is the one of access to the Master.

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

2073 - Master's Degree in Marketing and Market Research

- Capacidad de análisis y síntesis
- Capacidad para transmitir información y hacerse entender
- Capacidad para tomar decisiones
- Conocimiento de las técnicas de análisis multivariable comúnmente aplicadas en marketing
- Identificación de los tipos de datos necesarios para la correcta aplicación de las técnicas de análisis multivariable aplicadas al marketing
- Capacidad para interpretar desde la óptica de marketing los resultados de las técnicas de análisis multivariable
- Capacidad para redactar y presentar de forma clara a cualquier tipo de público informes de investigación de mercados resultantes de la aplicación de técnicas multivariables
- Habilidad para tomar decisiones y resolver problemas aplicando los conocimientos teóricos adquiridos.
- Capacidad de análisis y síntesis de información
- Habilidad para argumentar desde criterios razonables las decisiones adoptadas en el ámbito de marketing.
- Habilidad para argumentar desde criterios razonables.
- Manejar los programas informáticos necesarios para la introducción y análisis de los datos en la investigación marketing.
- Capacidad de relacionar los conocimientos teóricos y proponer nuevos conocimientos para el avance científico.

2114 - Master's Degree in Marketing and Market Research

- Saber aplicar los conocimientos adquiridos y ser capaces de resolver problemas en entornos nuevos o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con su área de estudio.
- Poseer las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.
- Ser capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios.
- Saber comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Ser capaces de buscar, ordenar, analizar y sintetizar la información, seleccionando aquella que resulta pertinente para la toma de decisiones.
- Saber trabajar en equipo con eficacia y eficiencia.
- Ser capaces de tomar decisiones tanto individuales como colectivas en su labor profesional y/o investigadora.
- Have a proactive attitude towards possible changes that may occur in their professional and/or investigative work.
- Be able to integrate new technologies in their professional and/or research work.
- Know how to write and prepare presentations to present and defend them later.
- Critically analyse one's own work and that of colleagues.
- Escoger la técnica de investigación de mercados adecuada al problema planteado.
- Ser capaces de tomar decisiones, desarrollar acciones y resolver problemas en marketing.
- Realizar una adecuada segmentación y selección del público objetivo.
- Redactar documentos e informes en marketing e investigación comercial.
- Presentar documentos e informes en marketing e investigación comercial.
- Saber realizar las labores propias de su profesión, tanto en empresas privadas como en organismos públicos.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

- Select and correctly use different sources of information in both traditional and electronic formats.
- Handle and correctly interpret quantitative and qualitative data to convert them into useful information for decision-making.
- Prepare documents and reports presented in a written text in a comprehensible organized, documented and illustrated way.
- Select and use market research tools appropriately.Identify the objectives and information needs for

the design of market research.
- Use the technical vocabulary of the subject.

DESCRIPTION OF CONTENTS

1. Basic tools

1.1 Univariate basic statistics
1.2 Tests of normality
1.3 Metrics and non-metric dependency tests
1.4 Tests of metric and nonmetric differences

2. Tools for positioning analysis

2.1 Correspondence analysis
2.2 Analysis of components

3. Tools for segmentation

3.1 Cluster Analysis

4. Explanation and prediction of metric variables (multiple regression)

4.1 Regression analysis

5. Workshop on R

WORKLOAD

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	35,00	100
Theory classes	0,00	100
Attendance at events and external activities	9,00	0
Development of group work	10,00	0
Readings supplementary material	4,00	0
Preparation of evaluation activities	22,50	0
Preparing lectures	15,00	0
Preparation of practical classes and problem	30,00	0
TOTAL	**125,50**	

TEACHING METHODOLOGY

- Theoretical classes participatory lecture.

- Resolution of practical cases.

- Seminars

The proposed methodology can be developed both in person and remotely if the circumstances require it.

EVALUATION

- Continuous evaluation through 5 practical cases (85%).
- Attendance and participation / performance in the planning and development of practical cases (15%)
- Final practical theoretical exam, if the subject is not passed with the continuous assessment. (85% - alternative to continuous evaluation)

If necessary, the weight of academic assignments may be increased, to adjust to possible teaching situations until reaching 100% of the grade.

With reference to **academic honesty and behavior**, the conduct consisting of cheating in an exam or plagiarizing an "assessable" work, is contrary to the duties of students included in both state and internal UV regulations. The immediate consequence of this type of conduct will be, in any case, the qualification with a zero and the failure of the subject, in accordance with the Regulation of Evaluation and Qualification (hereinafter REC) approved by the Government Council on May 30. of 2017 (art. 13 section 5); the University Student Statute, approved by RD 1791/2010, of December 30; and the Letter of rights and rights of the students of the University of Valencia, approved by Agreement of the Governing Council of October 19, 1993 and modified by ACG of April 30, 1998. All students are told that they cannot be used mobile phones or any other unauthorized electronic device or document. Any student who uses a mobile phone both in class, due to the existence of continuous assessment, and in the exam, will be invited to leave the classroom and will obtain a numerical grade of zero in the corresponding test (art. 13, section 6). The same type of conditions will apply to smart watch terminals or similar. The use of laptops or digital tablets is allowed for taking notes or viewing teaching material.

All of the above measures will be applied regardless of the disciplinary procedure that may be instituted against the student and, if possible, the appropriate sanction in accordance with current regulations (art. 13, section 7).

REFERENCES

Basic

- Materiales del curso. En el aula virtual se colgarán antes de cada sesión los apuntes, transparencias y bases de datos necesarias para el desarrollo de las sesiones.
- ALDAS MANZANO, Joaquin; URIEL JIMENEZ, Ezequiel. Análisis multivariante aplicado con R. Ediciones Paraninfo, SA, 2017.
- JAMES, Gareth, et al. An introduction to statistical learning. New York: springer, 2013.
- XIE, Yihui; DERVIEUX, Christophe; RIEDERER, Emily. R Markdown Cookbook. CRC Press, 2020.
- DIETZ, Sebastian, et al. R VisualizationsDerive Meaning from Data. Journal of the Royal Statistical Society Series A, 2021, vol. 184, no 1, p. 401-402.
- GIL-SAURA, R., 2021. Tablas y gráficos con R y R Studio. 1st ed. [ebook] València: InvestigaOnline.com. ISBN: 978-84-09-29382-7;disponible en: https://tables.investigaonline.com.

Additional

- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1999). Análisis multivariante (Vol. 491). Madrid: Prentice Hall.
- Uriel, E., & Manzano, J. A. (2002). Análisis multivariante aplicado (Vol. 76, pp. 270-271). Paraninfo.
- James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). An introduction to statistical learning (Vol. 112). New York: springer.
- De Vries, A., & Meys, J. (2015). R for Dummies. John Wiley & Sons.
- Chapman, C., & Feit, E. M. (2015). R for marketing research and analytics. New York, NY: Springer.
- Méndez, Mariano. Análisis de datos con R: Una aplicación a la investigación de mercados. ESIC Editorial, 2018.
- Chapman, Chris; Feit, Elea McDonnell. R for marketing research and analytics. New York, NY: Springer, 2015.
- Uriel, E. y Aldás, J. (2017). Análisis multivariante aplicado con R. Ediciones Paraninfo, SA.
- Hair,J.F. Babin,J.B., Anderson, R.E., Black, W.. Multivariate Data Analysis (2022), ebook, Cengage Learning.