

**COURSE DATA****Data Subject**

Code	40101
Name	Multivariant techniques in market research
Cycle	Master's degree
ECTS Credits	5.0
Academic year	2021 - 2022

Study (s)

Degree	Center	Acad. year	Period
2114 - M.D. in Marketing and Market Research	Faculty of Economics	1	First term

Subject-matter

Degree	Subject-matter	Character
2114 - M.D. 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

En relación con otras asignaturas de la misma titulación, no se han especificado restricciones de matrícula con otras asignaturas del plan de estudios. Los conocimientos previos son los propios de acceso al Máster.

OUTCOMES

2073 - M.U. Marketing e Investigación de Mercados (2007)

- 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 multivariadas
- 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 - M.D. 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.
- Ser capaces de analizar de forma crítica tanto su trabajo como el de su compañeros.
- 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

- 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.

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.

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

The teaching of the 2020-2021 academic year to which this Teaching Guide refers is scheduled in face-to-face mode.

If at any time, during the course, for justified and supervening reasons it could not be carried out as planned, the responsible teaching staff will communicate more specific and detailed information about the changes that should be made through the Virtual Classroom of the subject.

Given the possibility of quarantine of some students or confinement of the population, the possibility of teaching distance learning by synchronous methods is contemplated, allowing the full development of the program. The appropriate measures will be taken if necessary, to facilitate access to the training sessions of any student who has to observe quarantine unexpectedly throughout the course.