

**COURSE DATA****DATA SUBJECT**

Code: 44860
Name: Methodology: Master thesis
Cycle: Master's Degree / Doctorate
ECTS Credits: 4
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2235 - Master's degree Erasmus Mundus on Work, Organizational and Personnel Psycho	Facultat de Psicologia i Logopèdia	1	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2235 - Master's degree Erasmus Mundus on Work, Organizational and Personnel Psycho	Research training	MASTER THESIS PROJECT

COORDINATION

TOMAS MARCO MARIA INES

GONZALEZ ROMA VICENTE

SUMMARY

This course gives the students the opportunity to get deeper in the use and understanding of research methods directly related to the specific methodologies they are using in their research projects. In this sense, the course aims to equip students with the guidance of a methodologist that can advice them with the methodological aspects of their research project. So that, although some methodological techniques are proposed, it has a flexible content structure and changes are considered taking into account the specific demand of the students.

A special emphasis will be put on the need to take into consideration contextual and cultural issues when designing a WOP-P study. Measurement issues will be addressed when cultural comparison is the focus. Regarding statistical data analysis, attention will be paid to how to test the role of contextual and cultural variables, when needed.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**



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

OTHER REQUIREMENTS

This course assumes that graduated students have a working knowledge of basic statistics, including descriptive statistics (central tendency, variability), and covariance, correlation and simple regression. It is also assumed that students are able to conduct the statistical analyses covered in the Methodology Explanatory course such (first year, first semester), such as exploratory factor analysis and regression analysis.

COMPETENCES / LEARNING OUTCOMES

2235 - Master's degree Erasmus Mundus on Work, Organizational and Personnel Psycho

Que los estudiantes sean capaces de analizar datos de investigación en psicología del trabajo, de las organizaciones y de los recursos humanos.

Que los estudiantes sean capaces de elaborar informes en el contexto de la psicología del trabajo, de las organizaciones y de los recursos humanos.

Que los estudiantes sean capaces de formular preguntas de investigación, estrategias de investigación, cuestiones de diseño de investigación (fiabilidad, validez, etc.) y cuestiones de diseño de investigación en psicología del trabajo, de las organizaciones y de los recursos humanos.

Que los estudiantes sean capaces de presentar oralmente trabajos de integración en psicología del trabajo, de las organizaciones y de los recursos humanos.

Que los estudiantes sean capaces de proporcionar retroalimentación a diferentes actores en el contexto de la psicología del trabajo, de las organizaciones y de los recursos humanos.

Que los estudiantes sean capaces de recopilar datos para la investigación en psicología del trabajo, de las organizaciones y de los recursos humanos.

Que los estudiantes sean capaces de redactar trabajos de investigación en psicología del trabajo, de las organizaciones y de los recursos humanos.

Que los estudiantes sean capaces de revisar la literatura, formular hipótesis y poner a prueba dichas hipótesis en psicología del trabajo, de las organizaciones y de los recursos humanos.

Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.

Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.

Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.

Students should demonstrate self-directed learning skills for continued academic growth.



Students should possess and understand foundational knowledge that enables original thinking and research in the field.

DESCRIPTION OF CONTENTS

1. Introduction to multivariate analysis in WOP-P
2. Reliability of measurement instruments.
3. Validity of measurement instruments.
Exploratory factor analysis (EFA).
Confirmatory factor analysis (CFA).
Introduction to measurement equivalence with CFA.
4. T-test
Concept and applications. Applying t-test.
5. Analysis of Variance (ANOVA)
Concept and applications. Applying ANOVA.
6. Regression models
Mediated regression models.
Moderated regression models.
Moderated mediation models.
5. Structural equation models (SEM)
Models with observed variables. Models with latent variables.
Estimation of the structural models (analysis of models with observed and latent variables).

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at supplementary activities	40,00
Monitoring and tutoring of the master's thesis	0,00
Presentation and defence of the master's thesis	0,00
Total hours	40,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent preparation of the master's thesis	60,00
Preparation of the master's thesis project	0,00
Total hours	60,00



TEACHING METHODOLOGY

The following teaching techniques will be used:

- Readings.
- Oral presentations by the students.
- Article analysis.
- Written reports and manuscripts.
- Individual and group tutoring.

EVALUATION

Students will be evaluated on a scale of 0 to 10, using the following weightings:

1. Quality of oral presentations. This will represent 20% of the final grade.
2. Quality of research reports (research manuscript). This will represent 80% of the final grade.

Given the nature of this course, competencies cannot be assessed through an exam.

Additional considerations:

- To pass the course, students must achieve at least 50% of the final grade.
- Any blatant copying or plagiarism of any assignment included in the assessment will result in the inability to pass the course.

REFERENCES

- Berry, W. D. & Feldman, S. (1985). *Multiple regression in practice*. Newbury Park, CA: Sage.
- Cohen, J. & Cohen, P., West, S. G. & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*, 3rd ed. Hillsdale, NJ: LEA.
- Evans, J. (2007). *Your Psychological project*. Sage.
- Hair, JF; Anderson, RE; Tatham, RL; Black, WC (2005). *Multivariate data analysis*. Prentice All International.
- Hayes, A. F. (2012). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]*. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis. A Regression-Based Approach*. Guilford Press



-
- Kim, J. & Mueller, C. W. (1978). Factor analysis. Newbury Park, CA: Sage.
 - Kline, R. B. (2004). Principles and Practice of Structural Equation Modeling (2nd Edition). New York: Guilford Publications
 - Navarro, D. J. & Foxcroft, D. R. (2019). Learning statistics with Jamovi: A tutorial for psychology students and other beginners. DOI: 10.24384/hgc3-7p15
 - Tabachnick, B. G., and Fidell, L. S. (2007). Using Multivariate Statistics , 5th ed. Boston: Allyn and Bacon.
 - Thompson, B (2004) Exploratory and Confirmatory Factor Analysis: Understanding Concepts and Applications. EdD APA