



UNIVERSIDADE LUSÍADA
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Course Unit Program
INVESTIGATION METHODS AND DATA ANALYSIS I

Academic Year 2024/2025

1. Organic Unit

Institute of Psychology and Educational Sciences (3rd cycle)

2. Course

APPLIED PSYCHOLOGY: HEALTH AND WELL-BEING

3. Cycle

3rd

4. Course Unit

INVESTIGATION METHODS AND DATA ANALYSIS I (I9002)

5. Scientific Area

6. Curricular Year

1st

7. Type of Curricular Unit / Semester

1st Semester



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8. Class type and workload (work time)

Theoretical classes:

Practical classes:

Theoretical-Practical Classes

Tutorial Guidance:

9. ECTS Credits

12,00

10. Scientific Area Coordinator

11. Regent

Prof. Doutor MIGUEL DA COSTA NUNES DE FREITAS

12. Assistants

13. Teaching Language

Portuguese

14. General Objectives

This module, which will be continued in MIADII, aims to promote in-depth knowledge and skills in research methods and quantitative data analysis in PsicApl SBE and the critical ability to evaluate the most appropriate data analysis techniques for the development of students' Research Projects.

15. Specific Objectives

The appropriate Learning Objectives for this Cycle of Studies are to:

- Promote the development of advanced research skills in Applied Psychology
- Promote autonomy in the development of research in fields of Applied Psychology

16. Skills to be acquired

Students are expected to:

- O1 select and adapt statistical tests according to the research hypotheses
- O2 carry out advanced quantitative data analysis and show mastery of the appropriate software
- O3 interpret the statistical results obtained according to the research hypotheses
- O4 report the statistical results obtained

17. Teaching Methodology



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Expositive/demonstrative and interactive methodologies with reflective/corrective feedback. Structured lectures/demonstrations on methods and techniques for analysing quantitative data, promoting students' competence in carrying them out (O1, O2).

At the same time, students will have to practise applying and carrying out analyses using statistical tests, using

statistical analysis software (SPSS, AMOS and HLM).

Students will also learn how to interpret statistical results, as well as how to p

18. Course Unit Program

Part I:

Principles of research methodology

Research designs

Research methods

Part II

Descriptive statistics

Inferential statistics

Tests of association (correlation and linear regression)

Test of mean differences (t-tests)

Non-parametric alternatives

Part III

Univariate Analysis of Variance

Moderation and Mediation Analysis

Part IV

Multivariate Analysis of Variance

Cluster Analysis

Structural Equation Modelling (SEM)

Confirmatory Factor Analysis (CFA)

19. Assessment Methods

- Individual coursework

20. Didactic Resources

seminars, lectures, practical classes using SPSS, group work

21. Sustainability Objectives



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Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational

skills, for employment, decent jobs and entrepreneurship

Target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development.

22. Keywords

statistics

quantitative methods

research



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23. Main Bibliography

Author(s): Haslam, S.A., McGarty, C., Cruwys, T. & Steffens, N.K.
Title: Research Methods and Statistics in Psychology
Edition: 4 Year: 2024
Local:
Publisher: Sage

Author(s): Gross-Sampson, M.
Title: Statistical Analysis in JASP: A guide for students
Edition: 2 Year: 2019
Local: x
Publisher: x

Author(s): Gravetter, F.J. & Forzano, L-A. B.
Title: Research methods for the behavioral sciences
Edition: 6^a Year: 2019
Local: Boston
Publisher: Cengage Learning

24. Complementary Bibliography

Author(s): Rex B. Kline
Title: Principles and Practice of Structural Equation Modeling
Edition: 5 Year: 2023
Local:
Publisher: Guilford Press

Author(s): Howell, D. C.
Title: Fundamental Statistics for the Behavioral Sciences
Edition: 9^a Year: 2017
Local: Boston
Publisher: Cengage Learning



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Ficha técnica MIP / MIP Datasheet	
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