FACULTY OF LANGUAGES AND TRANSLATION

DOCTOR OF PHILOSOPHY IN APPLIED LANGUAGE SCIENCES

LEARNING MODULE OUTLINE

Academic Year	2025/2026	Semester	1
Module Code	PALS8121-111		
Learning Module	Research Methodology		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	3	Contact Hours	45
Instructor	Mark Feng Teng Daisy Li	Email	markteng@mpu.edu.mo lili@mpu.edu.mo
Office	B211, Chi Un Building, Main Campus	Office Phone	8599 6509 8599 6282

MODULE DESCRIPTION

This course examines the basics of quantitative/experimental/qualitative research in applied language sciences. By considering research designs and methodologies for conducting quantitative/experimental/qualitative research, and by discussing how to organize and interpret research data, this course will provide students with a foundation for designing and conducting research in language sciences, and it will assist students in critically reading research literature. Topics will include data collection, participant selection, ethical considerations, experimental methods, research designs, and introductory inferential statistics. This course will serve doctoral students who are interested in learning the basics of quantitative/qualitative research design and data analysis, as well as students who want to refine their current research projects.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

On completion of this learning module, students will be able to:

M1.	Explain key concepts, principles, and paradigms in research methods relevant to applied language sciences
M2.	Critically evaluate published research in applied language sciences for methodological rigor and validity.
M3.	Formulate clear and researchable questions or hypotheses in the field of applied language sciences.
M4.	Select and justify appropriate qualitative, quantitative, or mixed methods research designs for specific research problems.
M5.	Apply ethical principles in designing and conducting research in applied language sciences.
M6.	Analyze and interpret data using suitable methods and present research findings clearly and effectively.

These ILOs aims to enable students to attain the following Programme Intended Learning Outcomes (PILOs):

PILOs	M1	M2	M3	M4	M5	M6
P1. Demonstrate a comprehensive understanding of core concepts, theories, and frameworks in applied language sciences.	✓					
P2. Critically analyze, synthesize, and evaluate current research literature and theoretical developments in applied language sciences.		✓		✓		✓
P3. Design, implement, and manage original empirical research projects using appropriate methodologies in applied language sciences.			✓	✓	✓	✓
P4. Apply rigorous ethical standards and professional integrity in research and professional practice.		✓			✓	
P5. Analyse, interpret, and communicate complex research findings through scholarly writing, presentations, and other academic formats.	✓	✓	✓	✓	✓	✓
P6. Reflect critically on personal research practices and demonstrate a commitment to ongoing professional and academic development.	✓	✓	✓	✓	✓	✓
P7. Integrate interdisciplinary perspectives from linguistics, education, psychology, and related fields to address complex issues in language sciences.	✓	✓	✓	✓	✓	✓
P8. Demonstrate advanced problem-solving skills by proposing innovative solutions to theoretical and practical challenges. in applied language sciences.	✓	✓	✓	✓	✓	✓
P9. Engage constructively with academic, professional, and. community stakeholders to disseminate research findings and contribute to knowledge transfer.	✓	✓	✓	✓	✓	✓
P 10. Demonstrate leadership and autonomy in planning, conducting, and evaluating independent research that advances the field of applied language sciences.	✓	✓	✓	✓	✓	✓

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week	Content Coverage	Contact Hours
1	Research methods and understanding of the trends, software introductions, software applications for data analysis	3
2	Research Questions, Hypotheses and Sampling Strategies, software applications for data analysis	3
3	Writing literature review, validity and reliability, software applications for data analysis	3
4	Research methods: Qualitative research method, software applications for data analysis	3
5	Research methods: Research design, Quantitative research method, software applications for data analysis	3

6	The Nature and Process of Quantitative Research, data collection, software applications for data analysis	3
7	Five top data analysis, software applications for data analysis	3
8	Measurement and Statistical Concepts, software applications for data analysis	3
9	Surveys and Questionnaires for Data Collection: Use Existing Ones or Not?, Structural equation modelling, software applications for data analysis	3
10	Quantitative Content Analysis. TESTS for data analysis and interpretation	3
11	Translation Studies: a brief introduction	3
12	Descriptive Translation Studies (DTS)	3
13	Interview as a research method	3
14	Corpus/Digital/AI Tools for applied language studies (Sketch engine, AntConc…)	3
15	Students presentations	3

TEACHING AND LEARNING ACTIVITIES

In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities:

Teaching and Learning Activities	**M1**	**M2**	**M3**	**M4**	**M5**	**M6**
T1. Lectures and group discussions	✓	✓	✓	✓	✓	✓
T2. Tutorials and software applications			✓		✓	✓
T3. In-class and out-of-class practice and workshops	✓	✓	✓	✓	✓	✓

ATTENDANCE

Attendance requirements are governed by the Academic Regulations Governing Doctoral Degree Programmes of the Macao Polytechnic University. Students who do not meet the attendance requirements for the learning module shall be awarded an 'F' grade.

ASSESSMENT

In this learning module, students are required to complete the following assessment activities:

Assessment Activities	**Weighting (%)**	**ILOs to be Assessed**
A1. Class participation and performance	10	M1-M6
A2. Write a research design based on literature review	30	M1-M5
A3. Data analysis and interpretation	30	M6
A4. Presentations	30	M1-M6

The assessment will be conducted following the University's Assessment Strategy (see www.mpu.edu.mo/teaching_learning/en/assessment_strategy.php). Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits.

MARKING SCHEME

Excellent: Strong evidence of original thinking; good organisation, capacity to analyse and systemise; superior grasps of subject matter; strong evidence of extensive knowledge base.

Very Good: Evidence of grasps of subject; strong evidence of critical capacity and analytical ability; good understanding of issues; evidence of familiarity with literature.

Good: Evidence of grasp of subject; some evidence of critical capacity and analytical ability; reasonable understanding of issues; evidence of familiarity with literature.

Satisfactory: Profiting from the study experience; understanding of the subject; ability to develop solutions to simple problems in the material.

Pass: Sufficient familiarity with the subject matter to enable the student to progress without repeating the learning module.

Fail: Little evidence of familiarity with the subject matter; weak in critical and analytical skills; limited, or irrelevant use of literature.

REQUIRED READINGS

Dornyei, Z. (2007). *Research methods in applied linguistics.* Oxford university press.

McKinley, J., & Heath R. (eds.) (2019). *The Routledge Handbook of Research Methods in Applied Linguistics.* Routledge.

REFERENCES

Navarro, D., & Foxcroft, D. (2025). *Learning statistics with jamovi: A tutorial for beginners in statistical analysis.* Cambridge, UK: Open Book Publishers.

Morgan et al. (2014). *SPSS for introductory statistics.* Lawrence Erlbaum.

Morgan et al. (2020). *SPSS for introductory statistics: Use and interpretation.* Routledge.

Ellis, P. D. (2010). *The essential guide to effect sizes.* Cambridge.

许宏晨 (2013) 第二语言研究中的统计案例分析。外语教学与研究出版社。

STUDENT FEEDBACK

At the end of every semester, students are invited to provide feedback on the learning module and the teaching arrangement through questionnaires. Your feedback is valuable for instructors to enhance the module and its delivery for future students. The instructor and programme coordinators will consider all feedback and respond with actions formally in the annual programme review.

ACADEMIC INTEGRITY

The Macao Polytechnic University requires students to have full commitment to academic integrity when engaging in research and academic activities. Violations of academic integrity, which include but are not limited to plagiarism, collusion, fabrication or falsification, repeated use of assignments and cheating in examinations, are considered as serious academic offenses and may lead to disciplinary actions. Students should read the relevant regulations and guidelines in the Student Handbook which is distributed upon the admission into the University, a copy of which can also be found at www.mpu.edu.mo/student_handbook/.