INTERNATIONAL QUALIFICATIONS AND ASSESSMENT CENTRE (IQAC)

«Approved»

2025 y. «16» iyul

Programme	**Level 4 Extended Diploma in Strategic Business Management (RQF)**		
Unit Number/ Unit Title	**UNIT 6 RESEARCH METHODS AND DATA ANALYSIS**		
Cohort Code:	L04RMDA-U6		
Unit Level	LEVEL 4		
Total GLH	Total qualification time 200/ Total Guided learning hours 90/ Self-guided learning hours 110		
Credits/Hours	20 CATS/ 10 ECTS		
Lecturer			
Start Date		**End Date**	

Unit Aims	This unit aims to develop students' ability to apply research methods/methodologies and research design principles as well as data collection and analysis techniques for investigating business problems and making informed decisions.
Differentiation Strategies *(e.g. planned activities or support for individual learners according to their needs)*	Various approaches to addressing the various identified students' needs will be adopted throughout the lesson. Such will include: 1. Progressive tasks 2. Digital resources 3. Verbal support 4. Variable outcomes 5. Collaborative learning 6. Ongoing assessment 7. Flexible-pace learning

Equality & Diversity	Variety of teaching techniques will be employed to ensure that the needs of each individual learner are met.
Safeguarding & Prevent	Safeguarding policies and the Prevent duty are strictly observed to ensure the safety, well-being, and inclusivity of all students and staff.
Health & Safety	SIRM H&S policies will be maintained.
Learning Resources	**Teaching and Learning Materials** Bryman, A., & Bell, E. (2019). "Business Research Methods." Oxford University Press. Sekaran, U., & Bougie, R. (2019). "Research Methods for Business: A Skill-Building Approach." Wiley. Creswell, J. W., & Creswell, J. D. (2017). "Research Design: Qualitative, Quantitative, and Mixed Methods Approaches." Sage Publications. Field, A. (2018). "Discovering Statistics Using IBM SPSS Statistics." Sage Publications. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). "Multivariate Data Analysis." Pearson.

Learning Outcome	Assessment Criteria
LO1. Learner will be able to understand research methodologies	AC 1.1: Define various research methodologies (qualitative, quantitative, mixed methods) and their applications in different academic and professional fields. AC 1.2: Explain the principles and ethical considerations involved in conducting research. AC 1.3: Analyse the strengths and limitations of different research methodologies.
LO2. Learner will be able to apply research design principles.	AC 2.1: Design research studies by formulating research questions, hypotheses, and objectives. AC 2.2: Select appropriate research methods and data collection techniques based on the research objectives and scope. AC 2.3: Justify the chosen research design and methods based on their alignment with the research goals and feasibility.
LO3. Learner will be able to conduct data collection and analysis.	AC 3.1: Collect and manage data using suitable methods (surveys, interviews, experiments, etc.) ensuring accuracy and reliability. AC 3.2: Apply data analysis techniques (qualitative or quantitative) to interpret and draw conclusions from research findings. AC 3.3: Use relevant software or tools for data analysis and visualization purposes effectively.
LO4. Learner will be able to interpret and research findings.	AC 4.1: Interpret research findings accurately, drawing conclusions and insights based on data analysis. AC 4.2: Present research findings through written reports, presentations, or visual representations effectively. AC 4.3: Communicate research outcomes and implications clearly and concisely to different audiences (academic, professional, laypersons).
LO5. Learner will be able to evaluate research quality and ethical considerations.	AC 5.1: Evaluate the quality, validity, and reliability of research AC 5.2: Assess ethical considerations and potential biases in research, proposing strategies to address them. AC 5.3: Reflect on the ethical responsibilities and implications of research in various contexts.

No	Learning Outcomes/Topic	Learning and Teaching Outcomes	Which assessment criteria does the session relate to?	Day/month/year/ signature
1.	Introduction to Research & Methodologies	• Lecture: Purpose of research; Types of research (basic vs applied). Group discussion: Academic vs industry examples.	LO1, AC 1.1	
2.	Qualitative, Quantitative, and Mixed Methods	• Lecture: Compare methodologies. Case examples in different disciplines.	LO1, AC 1.1	
3.	Principles and Ethics in Research	• Lecture: Informed consent, confidentiality, plagiarism. Workshop: Ethical dilemma scenarios.	LO1, AC 1.2	
4.	Strengths & Limitations of Research Approaches	• Group Activity: SWOT of different methodologies. Discussion: When and why certain methods work best.	LO1, AC 1.3	
5.	Revision class	• **Task 1: Research Method Selection and Justification** Instructions: In groups, analyze a real-world problem and choose the most suitable research method (qualitative, quantitative, or mixed), justifying your choice in writing. Objective: Apply understanding of research methodologies by matching appropriate methods to specific research problems and explaining the rationale. • **Task 2: Ethical Review Exercise** Instructions: Review a sample research proposal and identify potential ethical issues related to consent, confidentiality, or bias, then recommend improvements. Objective: Recognize ethical dilemmas in research and propose solutions to ensure compliance with ethical standards.	LO1, AC 1.1, AC 1.2, AC 1.3	

6.	Formulating Research Questions & Hypotheses	Lecture: Researchable questions vs non-researchable. Workshop: Create questions & hypotheses.	LO2, AC 2.1	
7.	Setting Research Objectives	• Group Activity: Define SMART research objectives for different case scenarios.	LO2, AC 2.1	
8.	Selecting Research Methods	• Workshop: Matching objectives to methods (e.g. survey, case study, experiment	LO2, AC 2.2	
9.	Justifying Research Design	• Discussion: Aligning design with feasibility and goals. Group Task: Present and defend a mini research design.	LO2, AC 2.3	
10.	Revision class	• **Task 1: Methodology Evaluation and Design Planning** **Instructions:** Review a published research paper and evaluate the strengths and weaknesses of its methodology; then propose an improved research design based on the same topic. **Objective:** Analyze methodology quality and apply design principles to enhance research effectiveness. • **Task 2: Research Planning Workshop** **Instructions:** Write a research question and hypothesis, then define SMART objectives and select a suitable research design with justification. **Objective:** Develop a clear and focused research plan by integrating key elements: question, hypothesis, objectives, and design.	LO2 AC 2.1, AC 2.2, AC 2.3	
11.	Review	• Review of research methods covered. **Activities**: • **Review Session**: Key concepts covered from weeks 1-10.	LO1, LO2	

		• **Mock Exam**: Practice questions on research methods and data analysis concepts. • **Feedback Session**: Discuss common issues faced by students.		
12.	Data Collection Techniques	• Hands-on: Develop and pilot test a questionnaire/interview guide.	LO3, AC 3.1	
13.	Managing and Ensuring Data Quality	• Lecture: Sampling, reliability, validity. Group Activity: Identify threats to data integrity.	LO3, AC 3.1	
14.	Data Analysis Techniques	• Lecture: Coding for qualitative data; Statistical tools for quantitative. Exercise: Apply descriptive analysis.	LO3, AC 3.2	
15.	Using Tools for Analysis and Visualization	• Workshop: Use of Excel/SPSS/NVivo/Tableau. Practice session with sample data.	LO3, AC 3.3	
16.	Midterm	• **Midterm assessment** covering all learning outcomes (theory and practical elements)	LO1, LO2, LO3	
17.	Feedback & Reflection	• Review of key concepts covered • Reflective discussion on research methods and data anlysis • Course evaluations	LO1, LO2, LO3	
18.	Interpreting Results	• Task: Analyze mock data and draw logical conclusions.	LO4, AC 4.1	
19.	Reporting Findings	• Workshop: Structure of a research report. Task: Write a results and discussion section.	LO4, AC 4.2	
20.	Visual Presentation of Data	• Activity: Create charts/infographics using sample findings.	LO4, AC 4.2	
21.	Communicating to Different Audiences	• Role Play: Present findings to peers, managers, and non-experts.	LO4, AC 4.3	

22.	Review Class/Presentation of cases	• **Task 1: Data Analysis Report Presentation** **Instructions:** Each group collects a small dataset (quantitative or qualitative), analyzes it using appropriate techniques (e.g., descriptive stats or thematic coding), and presents the findings using charts or coded themes. **Objective:** Demonstrate the ability to manage, analyze, and visually present data accurately using appropriate tools and methods. • **Task 2: Data Management and Ethics Briefing** **Instructions:** Prepare a group presentation on best practices in data organization, entry, confidentiality, and ethical data handling, using a hypothetical research project as context. **Objective:** Communicate effective strategies for ethical data collection, storage, and management in research.	LO4	
23.	Validity, Reliability, and Trustworthiness	• Group critique of published studies. Workshop: Identify flaws or gaps.	LO5, AC 5.1	
24.	Identifying Bias and Ethical Risks	• Lecture + Discussion: Types of bias. Case analysis: Real-world ethical issues.	LO5, AC 5.2	
25.	Ethics in Context	• Workshop: Reflective exercise on research responsibilities in business, health, education, etc.	LO5, AC 5.3	
26.	Ethics in Context	• Workshop: Reflective exercise on research responsibilities in business, health, education, etc. •	LO5, AC 5.3	
27.	Recognizing and Addressing Bias	• Identify and mitigate biases in research. • **Activities:** Lecture: Types of bias (sampling, confirmation, publication).	LO1-LO5	

		Group Activity: Spot bias in research excerpts. Class Discussion: Neutrality in analysis.		
28.	Reflecting on Research Ethics and Responsibilities	• Reflect on ethical responsibilities in research practices. • **Activities:** Lecture: Role of the researcher and research impact. Case Discussion: Controversial research examples. Workshop: Create an ethical checklist for research.	LO1-LO5	
29.	Final Exam Preparation		LO1-LO5	
30.	Final Exam		LO1-LO5	