



UNIVERSITI TEKNOLOGI MARA

ASM601: RESEARCH METHODS

Course Name (English)	RESEARCH METHODS APPROVED
Course Code	ASM601
MQF Credit	3
Course Description	This course aims to equip students with the necessary research skills to conduct research in the field of Office Systems and Management. Students will be exposed to research methodologies appropriate to their discipline as well as those most commonly used in other disciplines. Throughout this course, the students will make extensive use of library resources.
Transferable Skills	The ability to develop English writing skills, probing and problem solving skills. The use of library resources skills are enhanced.
Teaching Methodologies	Lectures, Lab Work, Case Study, Presentation, Small Group Sessions
CLO	CLO1 Explain the purpose for conducting research CLO2 Identify a problem and write a research proposal. CLO3 Design a review of literature related to the proposed project. CLO4 Analyze data using appropriate statistical tools.
Pre-Requisite Courses	No course recommendations
Topics	
1. INTRODUCTION TO RESEARCH PROPOSAL 1.1) Title page 1.2) Abstract 1.3) Table of Contents 1.4) List of Tables 1.5) List of Figures 1.6) Chapter 1: Introduction 1.7) Chapter 2: Literature Review 1.8) Chapter 3: Methodology 1.9) References 1.10) Appendices	
2. CHAPTER 1: THE ROLE AND IMPORTANCE OF RESEARCH 2.1) Definition, purpose and the importance of research. 2.2) Characteristic of Research 2.3) The Steps in Research Process 2.4) Types of research 2.5) Descriptive (emphasized) 2.6) Historical 2.7) Correlational 2.8) Experimental 2.9) Applied (Action Research) 2.10) Exploratory 2.11) Quasi Experimental 2.12) Basic vs Applied Research	

3. CHAPTER 2: THE RESEARCH PROCESS: COMING TO TERMS

- 3.1) Types of Variables
- 3.2) Dependent
- 3.3) Independent
- 3.4) Control
- 3.5) Extraneous
- 3.6) Moderator
- 3.7) Types of Hypothesis
- 3.8) Null Hypothesis
- 3.9) Research Hypothesis
- 3.10) Directional Hypothesis
- 3.11) Non-Directional Hypothesis
- 3.12) Samples and Population
- 3.13) The Concept of Significance

4. CHAPTER 3A: SELECTING A PROBLEM AND REVIEWING THE RESEARCH

- 4.1) Selecting a Problem
- 4.2) Defining Your Interest
- 4.3) From Idea to Research Question to Hypothesis
- 4.4) Reviewing the Literature (Types of Sources)
- 4.5) Reading and Evaluating Research
- 4.6) Using Electronic Tools in Your Research Activities
- 4.7) Using journals
- 4.8) Using abstracts
- 4.9) Using indexes
- 4.10) Using CD-ROMs
- 4.11) On-line
- 4.12) Writing the Literature Review
- 4.13) Basic Principles of Ethical Research
- 4.14) Ensuring High Ethical Standards
- 4.15)
- 4.16)
- 4.17) CHAPTER 3B: THE IMPORTANCE OF PRACTISING ETHICS IN RESEARCH
- 4.18) Basic Principles of Ethical Research
- 4.19) Ensuring High Ethical Standards

5. CHAPTER 4: SAMPLING AND GENERALIZABILITY

- 5.1) Populations and Samples
- 5.2) Probability Sampling Strategies
- 5.3) Simple Random Sampling
- 5.4) Systematic Sampling
- 5.5) Stratified Sampling
- 5.6) Cluster Sampling
- 5.7) Nonprobability Sampling Strategies
- 5.8) Convenience Sampling
- 5.9) Quota Sampling
- 5.10) Estimating Sample Size and Sampling Error

6. CHAPTER 5: MEASUREMENT, RELIABILITY, AND VALIDITY

- 6.1) Levels of Measurement
- 6.2) Nominal
- 6.3) Ordinal
- 6.4) Interval
- 6.5) Ratio
- 6.6) Reliability
- 6.7) Validity

7. CHAPTER 1: INTRODUCTION TO SPSS

- 7.1) Preparation of the Data
- 7.2) Instrument Development
- 7.3) Observation
- 7.4) Interview
- 7.5) Survey
- 7.6) Preparation of the Questionnaire with Cover Letter
- 7.7) Alignment of Questionnaire Based on Research Objectives
- 7.8) Getting Ready with Data Collection
- 7.9) The Data Collection Process

8. CHAPTER 2: PREPARATION OF THE DATA

- 8.1) Defining Variable
- 8.2) Entering Data
- 8.3) Choosing Appropriate Graph
- 8.4) Bar Chart
- 8.5) Pie Chart
- 8.6) Line Graph

9. CHAPTER 3: DATA SCREENING AND TRANSFORMATION

- 9.1) DATA SCREENING
- 9.2) Checking for Errors
- 9.3) Assessing for Normality
- 9.4) Graphical
- 9.5) Histogram
- 9.6) Boxplot
- 9.7) Stem and leaf plot
- 9.8) Normal probability plot
- 9.9) Detrended normal plot
- 9.10) Statistical
- 9.11) Kolmogorov Smirnov with Shapiro Wilk Statistics
- 9.12) Skewness
- 9.13) Kurtosis

10. CHAPTER 3: DATA SCREENING AND TRANSFORMATION

- 10.1) DATA TRANSFORMATION
- 10.2) Recode
- 10.3) Negatively worded scale items
- 10.4) Collapsing continuous to categorical variable
- 10.5) Compute
- 10.6) Total score
- 10.7) Mean score

11. CHAPTER 4: DESCRIPTIVE STATISTICS

- 11.1) Frequency Distribution
- 11.2) Measures of Central Tendency and Variability
- 11.3)
- 11.4) AND
- 11.5)
- 11.6) Distribution of Scores
- 11.7) Measures of Central Tendency
- 11.8) Mean
- 11.9) Mode
- 11.10) Median
- 11.11) Measures of Dispersion
- 11.12) Standard Deviation
- 11.13) Range
- 11.14) Variance
- 11.15) The Normal Curve (Bell-Shaped Curve)

12. CHAPTER 4: DESCRIPTIVE STATISTICS

- 12.1) CHOOSING THE RIGHT STATISTICS
- 12.2) Continuous vs Categorical Variable
- 12.3) Concept of Answering Research Objectives Through Data Analysis
- 12.4) Data Analysis
- 12.5) Relationship
- 12.6) Comparison Analysis

13. RELIABILITY ANALYSIS: INTERNAL CONSISTENCY

- 13.1) Examples from Journals on Reliability Cronbach Alpha values

14. RELIABILITY ANALYSIS: INTERNAL CONSISTENCY

- 14.1) Examples from Journals on Reliability Cronbach Alpha values

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Case Study	Case study	20%	CLO3
	Lab Exercise	SPSS test	10%	CLO4
	Written Report	Research Proposal	30%	CLO2

Reading List	Recommended Text	<ul style="list-style-type: none"> Salkind, Neil J. 2012, <i>Exploring Research</i>, 8th Ed., All, Pearson New Jersey Coakes, Sheridan J. 2013, <i>SPSS Version 20.0 For Windows: Analysis Without Anguish</i>, 5th Ed., All, John Wiley & Sons Australia
	Reference Book Resources	<ul style="list-style-type: none"> Babbie, K. 5th ed. Belmont, CA: 1998, <i>The Practice of Social Research</i>, 5th Ed., 4, 5, 7, Wadsworth Publishing Company. Belmont, California Sekaran, Uma 2012, <i>Research Methods for Business: A Skill Building Approach</i>, 7th Ed., John Wiley and Sons New Jersey

Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources