



LEAD CITY UNIVERSITY
Faculty of Social and Management Sciences
Department of Sociology and Psychology

COURSE PARTICULARS

Course Code: SOC 311

Course Title: **RESEARCH METHODS FOR SOCIAL SCIENCES II**

Course Units: 3

Course Status: Compulsory

LECTURER'S DETAILS

Name: Grace OLOUKOI

Qualifications: PDURP, BSc. MURP, Ph.D

Phone: +234806 368 5892; 805 216 3358

E-mail: oreofeadeniji@yahoo.com

Area of Specialization: Urban Planning, Environmental Resources Management and Climate Adaptation

COURSE DESCRIPTION

This course will combine the knowledge of analogue and computer-based techniques of quantitative analysis and how they can be used for explanation of social science theory and practice.

COURSE OBJECTIVES

- To identify various sampling techniques and their applications in the social science studies;
- To introduce students to methods of calculating inferential statistics and how they may be used for decision making in social sciences

ASSESSMENT

Attendance:	5%
Class Test and Assignment:	25%
Final Examination:	70%

LECTURE PLAN

Week	Topic
Week 1	Introduction and revision on Sampling techniques
Week 2	Descriptive and inferential statistics and Hypothesis formulation and testing
Week 3	Sampling theory
Week 4	Inferential statistic: Chi Square
Week 5	Student 't' test
Week 6	Correlation analysis: persons and Spearman correlation
Week 7	Partial variation
Week 8	Mid Term test
Week 9	Simple and multiple Regression Analysis
Week 10	Matrix
Week 11	Simultaneous Equation
Week 12	Introduction to the use of Social Statistics for Social sciences (SPSS)

READING LIST

1. Okoko, Eno (2000): Quantitative techniques in Urban Analysis. Kraft Books Ltd., Ibadan
2. Owa-Afolabi, F. And Bankole, B. (2008): Statistics for Business and Management. Solar Flare Communication, Lagos
3. Koutsoyiannis, A. (1972): Theory of Econometrics Palgrave, Ontario
4. IBM SPSS tutorial : www:/statistics/tutorial/help

TUTORIAL QUESTIONS

1. If the expected value is 100 for each of the classes in the table below, Use Chi-Square table to test if the sample drawn from each class is significantly biased

Class	Observed
A	50
B	15
C	85
D	40
E	60
F	95
G	105

2. A. Identify the importance of quantification analysis in social science studies
B. With reference to a topic, discuss the procedure for carrying out a sociology study from the inception to report written.
3. Compute 95% lower and upper of one sided bounds for immunization programme in Benue state of Nigeria which are normally distributed with mean of standard deviation of 50 if the health Ministry used a sample of 400
4. Use appropriate test to determine the difference in the averages between cases of divorce and juvenile delinquencies in these two Nigerian cities

Nigerian Cities	No of cases	Variance	Mean
Lagos	57	64	150
Aba	60	121	110

5. Write procedure for data entry and data analysis using the Statistics Package for social Sciences
6. Discuss sources of data in social survey. Explain in full the methods of triangulation in sociological study
7. A. Find the difference between coefficient of variability and relative variability for this table
B. Generate a pie chart and a frequency polygon for the data

Class	Frequency
1-6	5
7-12	6
13-18	10
19-24	7
25-30	4
31-36	6
37-42	7

8. A. Differentiate between the two types of correlation analysis
 B. calculate the Spearman's Rank correlation for this table

Criminal cases	Neighbourhood population index
100	4
10	0.1
30	5
15	0.4
9	3

9. Find the equation $Y = a + b(x)$ based on these equations

$$108 = 12a + 84b$$

$$888 = 84a + 794b$$

10. Find the determinant of this matrix and the equation of the two variables in the linear regression model being represented

$$\begin{matrix} 8 & 74 & 60 & 8 & 74 \\ 74 & 1066 & 436 & 74 & 1066 \\ 60 & 436 & 498 & 60 & 436 \end{matrix}$$

11. A. Solve these simultaneous equations:

$$4x^2 + y^2 = 13$$

$$x + y = 2$$

12. Find A+B and B-A inverse from these matrix

$$A = \begin{matrix} 2 & -2 & 4 \\ 1 & 3 & 5 \end{matrix}$$

$$B = \begin{matrix} 5 & -2 & 6 \\ -2 & 3 & 5 \end{matrix}$$