CBN COLLABORATIVE POSTGRADUATE PROGRAMME
DEPARTMENT OF ECONOMICS, UNIVERSITY OF NIGERIA NSUKKA
WORK PLAN
NAME OF LECTURER:
COURSE: ECO 591 RESEARCH METHODS

STUDY WEEK	TOPIC SUB-TOPIC	RESULTS LEARNING	TIME Hrs	METHODS	Suggested Videos
		Summary			
	Examination				
1	**INTRODUCTION TO RESEARCH METHODS** 1.1 Steps in the Process of Research 1.2 Research Design Introduction 1.2.1. Identifying a hypothesis and/or research problem 1.2.2 Specifying a purpose, 1.2.3 Creating research questions 1.3 Reviewing Literature and Database Searches	▪ Students will be able to: ▪ Grasp the Process of Conducting Research ▪ Outline the serial order of steps in research ▪ Identify hypothesis and/or research problem, ▪ Specify a purpose, ▪ Create research questions ▪ Search Databases, both hard (from Library), and electronic forms ▪ Review literature to cover theories, methodologies, and empirics	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

2	**THEORY IN RESEARCH DESIGN AND ETHICS** 2.1 Role of Theory in Research Design and Delivery 2.2 Research Ethics and Informed consent	Students will be able to: ▪ Appreciate the role of Theory in Research Design ▪ Appreciate the role of Theory in Research Delivery ▪ Understand the significance of ethical Considerations in the conduct of research work ▪ Draft Ethical statement, and seek approval ▪ Respect Informed Consent of respondents in research conduct ▪ Seek Parental Consent (minor) ▪ Use Information Sheet	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals
		Students will be able to:	1	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

3	**MEASUREMENT AND DATA COLLECTION** 3.1 Scales of Measurement 3.2 Data Collection Procedures 3.3 Data Management	Students will be able to: ▪ Understand the following measures and applicability to different issues in research: ▪ Nominal Scale ▪ Ordinal Scale ▪ Ratio scale ▪ Interval scale ▪ Collet and use Primary Data and Secondary Data ▪ Design and administer Questionnaire for data collection ▪ Determine Sample size from a study population in a representative manner ▪ Handle Missing Data and Response Bias without distorting the true outcome of the research work ▪ Consider attrition rate in selection of sample design ▪ Protect the privacy of Respondents ▪ Organise, store and process data in a manner that preserve Information	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

4	**QUALITTAIVE ESERCH METHODS** 4.1 Introduction to Qualitative Research 4.1.1 Essence of Qualitative Data 4.1.2 Sampling 4.1.3 Collection Techniques 4.2 Interpreting Qualitative Data 4.2.1 Qualitative Data Analysis Procedures 4.2.2 Coding 4.2.3 Thematic development	Students will be able to: ▪ Appreciate the components of Qualitative Research ▪ Review relevant literature to Qualitative Research Study ▪ Identify Qualitative Research Problems ▪ Define the targeted population to be studied ▪ Have full understanding of Sampling Methods ▪ Identify the appropriate sample technique for different research work ▪ Distinguish instances where the following sample procedure will be required: ▪ Representative Sample ▪ Unrepresentative Sampling ▪ Over Representative ▪ Identify the dependent and independent variables and specification form that reflects their relationships ▪ Choose appropriate Confidence levels ▪ Identify the features of Qualitative Data Analysis ▪ Set the stage and conduct a Qualitative Research Study ▪ Frame Research Problem as a Qualitative Study	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

		Students will be able to:		Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals
5	**QUANTITATIVE RESEARCH METHODS** 5.1 Introduction to Quantitative Research 5.2 Sampling Concepts 5.2.1Defining the Target Population 5.2.2 Representative Sample 5.2.3 Unrepresentative Sampling 5.2.4 Over Representative 5.2.5 Design Effect 5.2.6 Sampling Methods 5.3 Qualitative Data Collection Instruments 5.3.1 Choosing a good instrument 5.3.2 Interval and Ratio Scales	Students will be able to: Essence of Quantitative Research Making Predictions Collection and Analysis Techniq e Choose good instrument in the conduct of research work Apply Interval and Ratio Scales where applicable	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals
6	**MIXED METHODS RESEARCH** 6.1 Introduction to Mixed Methods Research 6.1.1 Advantages 6.1.2 Design Components 6.2 Explanatory Mixed Methods Framework	Students will be able to: ▪ Combine the use of both quantitative and qualitative research methods ▪ Determine the appropriate mix of quantitative and qualitative methods in a single research work ▪ Design the appropriate framework for inclusion of the two	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

7	**DESCRIPTIVE STATISTICS** 7.1 Summarizing and describing a collection of data 7.2 Univariate and bivariate analysis 7.3 Identifying randomness and uncertainty in data	Students will be able to: ▪ Use Mean, mode and standard deviation measures to summarise outcome of a research study ▪ Combine the use of Percentages and Ratios in research work ▪ Apply graphical representations (Histograms, Bar Charts…) of study information. ▪ Demonstrate skill data description, ▪ Make statistical inference, and ▪ Run regression analysis involving one variable ▪ Conduct regression analysis involving more than one variable ▪ Identify randomness in data pattern ▪ Identify element of uncertainty in the distribution of collected data	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

8-9	8.1 Drawing inference from data 8.2 Modelling assumptions 8.3 Identifying Patterns 8.4 Regression analysis 8.5 T-test 8.5.1 Analysis of Variance 8.5.2 Correlations, Significance and Power 8.5.3 Cross tabulation and Chi-square	Students will be able to: ▪ Have a full grasp of inferential statistics ▪ Interpret the parameter measures to arrive at conclusions on the subject matter of research. ▪ Students will be able to: ▪ Use spelt out assumption to build models of relationship between phenomenon Handle technical tools for sporting patterns inherent in a data distribution ▪ Use regression analysis to model and make predictions about real-world systems. ▪ Use regression analysis as a tool for statistical inference. Apply regression analysis as a key tool to evaluate hypothesis or research questions. ▪ Use t-test to determine if there is a significant difference between the means of two groups, which may be related in certain features ▪ Use ANOVA to test differences between two or more means. (test general means). ▪ Use correlation ▪ coefficients to assess the strength and direction of the linear relationships between pairs of variables. ▪ Use knowledge of cross tabulation to give understanding to relationship between two variables, limited to categorical data. ▪ Use statistical significance as basis for accepting or rejecting the null hypothesis,	6	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

10	**ANALYSIS METHODS IN IMPACT EVALUSTION** 9.1 Impact Evaluation	Students will be able to: ▪ **Impact evaluation** assesses the changes that can be attributed to a particular intervention, such as a project, program or policy, both the intended ones, as well as ideally the unintended ones.	**3**	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals
11	**PRESENTATION AND INTERPRETATION OF RESULTS** 10.1 Presentation of Results 10.1 Interpretation of Results	Students will be able to: ▪ Presents research results in three main formats: oral presentation; poster presentation; written paper. ▪ Present results in a concise verbal description of the outcome as well as tables and figures, showing statistical results and experimental error ▪ Present tables and figures to include legends explaining what is being summarized ▪ Relate findings to other findings from previous studies ▪ Indicate where findings aligned and do not align with findings in the literature. ■ Offer possible explanations as to why research findings corroborated or contradicted the findings of previous studies.	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

		Students will be able to:		Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals
12	**ELEMENTS OF PROJECT ANALYSIS** 11 Project Analysis	Students will be able to: Identify and explain the attribute or characteristics of a project Classify project based on different types of activities, location, completion time, ownership and size. Understand and Explain the lifecycle pattern of a project Grasp the characteristics of project management and process Specify the smart goals of a project and need identification Understand the criteria for project selection Familiarise with the numerical calculations for project decision making	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals

13	**GRANT AND RESEARCH PROPOSAL WRITING** 12.1 Grant Writing 12.2 Research Proposal Writing	Students will be able to: ▪ Understand the importance of presentation when writing a grant proposal ▪ Understand common mistakes in the process of grant proposal writing ▪ Understand what kinds of projects typically achieve successes when submitted ▪ Identify the steps in developing a research proposal. ▪ Choose a topic and formulate a research question and working thesis. ▪ Use writing tools to put their thoughts together in a document ▪ Harvest ideas from other by allow them to read what they have written ▪ Receive and accept comments and criticism for incorporation in the proposal Develop a research proposal.	3	Lectures, Tutorials, Active Student Participation and power-point presentations	Online videos and other recommended visuals
14	**REVISION WEEK**				
15	**EXAMINATION**				

Lecturer:

PROGRAMME LEADER