

A World Bank-funded Centre of Excellence

Superintendent: Professor Olanrewaju Adigun Fagbohun, SAN, NPOM (Vice-Chancellor)

Facilitator-General

Professor Peter A. Okebukola

ACE 811/911- Advanced Educational Research and Statistics

Course Objectives

At the conclusion of the course, students should be able to:

1. describe the research process and emerging trends in educational research;
2. state types of research with focus on descriptive and experimental studies;
3. construct and determine validity and reliability of research instruments.
4. conduct online surveys;
5. conduct pure and quasi-experiments;
6. identify the challenges to quality research in Africa and ways of overcoming the obstacles;
7. apply inferential and non-inferential statistics for analysing quantitative data;
8. conduct meta-analysis of research;
9. apply qualitative methods for data collection and analysing such data;
10. conduct and report mixed-methods studies;
11. acquire skills for publishing in reputable national and international journals; avoiding predatory journals; and
12. develop awareness of ethical issues in research.

Course content

The research process and emerging trends in educational research. Types of research with focus on descriptive and experimental studies. Sampling techniques. Instrumentation in research. Practical guide for constructing and determining validity and reliability of research instruments especially questionnaires, achievement tests and attitude inventories. Conducting online surveys. Conducting pure and quasi experiments. Challenges to quality research in Africa and overcoming the obstacles. Inferential and non-inferential statistics for analysing quantitative data especially parametric (e.g. t-test, anova, ancova, mancova, AMOS, cluster analysis, multiple regression). and non-parametric statistics (e.g.chi-square, Kruskal-Wallis). Conducting meta-analysis of research. Qualitative methods including data collection through interviews, field observations. Internal and external validity in qualitative research. Reporting qualitative research. Conducting and reporting mixed-methods studies. Publishing in reputable national and international journals- avoiding predatory journals. Ethical issues in research.

Event	Facilitator
<ul style="list-style-type: none"> • Live orientation to the course and presentation of “Issues in Advanced Research Methods and Statistics” (45 minutes followed by Q&A) 10.11 a.m. 	Professor Peter A. Okebukola
<ul style="list-style-type: none"> • Live lecture on “The research process and emerging trends in educational research” (45 minutes followed by Q&A) 11a.m.12 noon 	

	Professor Olusola Adesope (USA)
--	------------------------------------

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture on “Types of research with focus on descriptive and experimental studies” (45 minutes followed by Q&A) 10.00-11.00a.m. • Live lecture: “Constructing and determining the validity and reliability of achievement tests” (45 minutes followed by Q&A) 11.00a.m. 12 noon 	<p>Professor Peter A. Okebukola</p> <p>Professor Abayomi Arigbabu (VC, TASUED)</p>
Live lecture: “Advanced techniques in sampling.” 10.00 a.m. to 11 a.m.	Professor Oye Bandele

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Constructing and determining the validity and reliability of questionnaires” (45 minutes followed by Q&A) 11.00a.m. 12 noon • Live lecture: “Conducting online surveys” (45 minutes followed by Q&A) 11.00a.m. 12 noon 	<p>Dr. Michael Arove (LASU)</p> <p>Dr. Rasheed Sanni (LASU)</p>

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Conducting pure and quasi-experiments” (45 minutes followed by Q&A) 10.00a.m -11 a.m. • Live lecture: “Challenges to quality research in Africa and ways of overcoming the obstacles” (45 minutes followed by Q&A) 11.00a.m. 12 noon 	<p>Professor Tunde Owolabi (LASU)</p> <p>Professor Juma Shabani (Burundi)</p>

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Multiple regression analysis Part 1” (45 minutes followed by Q&A) 10.00a.m -11 a.m. • Live lecture: “Multiple regression analysis Part 2” (45 minutes followed by Q&A) 11.00a.m. 12 noon 	<p>Professor Abayomi Adelaja Arigbabu (Vice-Chancellor, Tai Solarin University of Education)</p>

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Hypothesis Testing - logic of hypothesis testing, process for hypothesis testing, Uncertainty and errors in Hypothesis testing” (45 minutes followed by Q&A) 10.00a.m -11 a.m. • Live lecture: “ Correlation - Characteristics of relationship that correlation measures, the Pearson Correlation, usage and interpretation of Pearson Correlation, The Spearman Correlation ” (45 minutes followed by Q&A) 11.00a.m. 12 noon 	<p>Prof Taslim Ayobami HAMMED University of Ibadan</p>

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Non-parametric Statistics 1” (45 minutes followed by Q&A) 10.00a.m -11 a.m. • Live lecture: “Non-parametric Statistics II” (45 minutes followed by Q&A) 11.00a.m. 12 noon 	<p>Dr. Rasheed Sanni (LASU)</p>

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Factor analysis - 1” (40 minutes followed by Q&A) 10.00a.m -11 a.m. 	<p>Dr. Rasheed Sanni (LASU)</p>

<ul style="list-style-type: none"> • Live lecture: “Factor analysis - 2” (40 minutes followed by Q&A) 11.00a.m. 12 noon 	
---	--

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Conducting meta-analysis of research -1” (40 minutes followed by Q&A) 10.00a.m -11 a.m. • Live lecture/Practicals: “Conducting meta-analysis of research - 2” (40 minutes followed by Q&A) 11.00a.m. 12 noon 	Professor Olusola Adesope (USA)
<p style="text-align: center;">Advanced Statistics Workshop continues</p> <p style="text-align: center;">10.00a.m. to 1p.m.</p> <p>Live Hands-on Workshop on Meta-analysis of research”</p>	Professor Olusola Adesope (USA)

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Conducting qualitative Research” (40 minutes followed by Q&A) 10.00a.m -11 a.m. • Live lecture: “Conducting qualitative research -2” (40 minutes followed by Q&A) 11.00a.m. 12 noon 	Dr. Femi Jaiyeola (USA)

Event	Facilitator
<ul style="list-style-type: none"> • Live lecture: “Conducting and reporting mixed-methods research” (40 minutes followed by Q&A) 10.00a.m -11 a.m. • Live lecture: “Publishing in reputable national and international journals” (40 minutes followed by Q&A) 11.00a.m. 12 noon 	Dr. Femi Jaiyeola (USA) Professor Peter A. Okebukola and Professor Olusola Adesope (USA)
<p>Live lecture: “Writing scholarly articles in Good English” (40 minutes followed by Q&A) 11.00a.m. 12 noon</p>	Professor Asabe Kabir (Usmanu Danfodiyo University, Sokoto)
<p style="text-align: center;">Publishing in Scholarly Journals Workshop</p> <p style="text-align: center;">10.00a.m. to 1p.m.</p> <p>Live Hands-on Workshop on Engaging in Scholarship: From Conceptualisation through Publication in Top-Tier Journals</p>	Professor William C. Kyle, Jr (University of Missouri-St. Louis, USA)