

MODULE ONE

Day One, June 14 2021

Time	Duration	Activities	Facilitator
2.45pm – 3.00 pm	15mins	Welcome address	Prof. A. E. Adekoya / Prof. A. F. Adenikinju (Principal Investigators)
3.00pm – 4.15pm	75mins	Measurement and data collection Population, sample and sampling frame; Sampling methods Probability/Random -simple random sampling -selecting a simple random sample stratified random sampling systematic sampling cluster sampling Non-probability/Non-Random (convenience, snowball) Research Strategy (experimental, descriptive and correlational, survey, observational)	Prof. O. E. Olubusoye
4.15pm – 4.45pm	30mins	Questions & Answers	Mr. Iredele Ogunbayo / Moderator
4.45pm – 5.00pm	15mins	Break	All
5.00pm – 5.05pm	5mins	Session Resumption	Mr. Iredele Ogunbayo / Moderator
5.05pm – 6.25pm	80mins	Introduction to R Generating random numbers in R	Mr. O. J. Akintande
6.25pm – 7.00pm	35mins	Questions/Answers & Closing	Mr. Iredele Ogunbayo / Moderator
Day Two, June 15, 2021			
2.45pm – 3.00pm	15mins	Welcome Address	Prof. A. E. Adekoya / Prof. A. F. Adenikinju (Principal Investigators)
3.00pm – 4.15pm	75mins	Research Designs Types of Research Designs <ul style="list-style-type: none"> • One shot 	Dr. N.S. Olutegbe

		<ul style="list-style-type: none"> • Longitudinal • Cross-sectional • Repeated Independent Samples Advantages & Disadvantages of each Research Design	
4.15pm – 4.45pm	30 mins	Questions & Answers	Mr. Iredele Ogunbayo / Moderator
4.45pm – 5.00pm	10 mins	Break	All
5.00pm – 5.05pm	5 mins	Session Resumption	Mr. Iredele Ogunbayo / Moderator
5.05pm – 6.25pm	80mins	Data Types Nominal <ul style="list-style-type: none"> • Frequency distribution of nominal data (one variable) • Cross tabulation of nominal data (two variables) Ordinal <ul style="list-style-type: none"> • Frequency Distribution of Ordinal Data • Cross Tabulation of Ordinal Data with a normal variable Interval <ul style="list-style-type: none"> • Simple Scatter Plots in R • Bar graphs • Plotting bar graphs in R Ratio	Dr. O. A. Olutegbe
6.25pm – 7.00pm	35 mins	Questions/Answers & Closing	Mr. Iredele Ogunbayo / Moderator
Day Three, June 16 2021			
2.45pm – 3.00pm	15mins	Welcome address	Prof. A. E. Adekoya / Prof. A. F. Adenikinju (Principal Investigators)
3.00pm – 4.15pm	75mins	Validity <ul style="list-style-type: none"> ○ Experimental validity ○ Content validity ○ Construct validity ○ Discriminant validity ○ Predictive validity Reliability <ul style="list-style-type: none"> ○ Cronbach ' s Alpha ○ Parallel - Forms Reliability ○ Inter - Rater Reliability Test - Retest Reliability	Dr. O. A. Otekinrin
4.15pm– 4.45pm	30mins	Questions & Answers	Mr. Iredele Ogunbayo / Moderator
4.45pm– 5.00pm	15mins	Break	All

5.00pm– 5.05pm	5mins	Session Resumption	Mr. Iredele Ogunbayo / Moderator
5.05pm – 6.25pm	80mins	Cronbach's Alpha and other related computations in R	Mr. O. J. Akintande
6.25pm – 7.00pm	35mins	Questions/Answers & Closing	Mr. Iredele Ogunbayo / Moderator

MODULE TWO

Day One, June 21 2021

Time	Duration	Activities	Facilitator
2.45pm – 3.00 p.m.	15mins	Welcome address	Prof. A. E. Adekoya / Prof. A. F. Adenikinju (Principal Investigators)
3.00pm – 4.15pm	75mins	Data Collection Methods -Self-report -Physiological measures -Performance measures Descriptive and correlational designs -Correlational research -Causation and prediction -Surveys (data collection and construction of good survey items) -Observations (participant and non-participant observation)	Prof. O. E. Olubusoye
4.15pm– 4.45pm	30mins	Questions & Answers	Mr. Iredele Ogunbayo / Moderator
4.45pm – 5.00pm	15mins	Break	All
5.00pm – 5.05pm	5mins	Session Resumption	Mr. Iredele Ogunbayo / Moderator
5.05pm – 6.25pm	80mins	Data analysis in R (descriptive statistics - central tendency and spread)	Mr. O. J. Akintande
6.25pm – 7.00pm	35mins	Questions/Answers & Closing	Mr. Iredele Ogunbayo / Moderator
Day Two, June 22 2021			
2.45pm – 3.00pm	15mins	Welcome address	Prof. A. E. Adekoya / Prof. A. F. Adenikinju (Principal Investigators)

3.00pm – 4.15pm	75mins	<p>Inferential Statistics</p> <ul style="list-style-type: none"> -Formulating a statistical hypothesis -Type I and II errors -Determination of sample size -<i>p</i>-value concept and statistical significance -Practical significance -Cross tabulation and chi-square <p>Linear Regression (simple and multiple)</p> <p>Logistic Regression (binary and multinomial)</p>	Dr. O. A. Otekunrin
4.15pm – 4.45pm	30mins	Questions & Answers	Mr. Iredele Ogunbayo / Moderator
4.45pm – 5.00pm	15mins	Break	All
5.00pm – 5.05pm	5mins	Session Resumption	Mr. Iredele Ogunbayo / Moderator
5.05pm – 6.25pm	80mins	<p>Linear Regression (simple and multiple) in R</p> <p>Logistic Regression (binary and multinomial) in R</p>	Mr. O. J. Akintande
6.25pm– 7.00pm	35mins	Questions/Answers & Closing	Mr. Iredele Ogunbayo / Moderator
Day 3, June 23 2021			
2.45pm – 3.00pm	15mins	Welcome address	Prof. A. E. Adekoya / Prof. A. F. Adenikinju (Principal Investigators)
3.00pm – 4.15pm	75mins	<p>Basic experimental designs</p> <ul style="list-style-type: none"> -Experimental validity (internal and external) -Types of variables -Characteristics of experiments -Types of experimental designs <p>Random Groups design</p> <p>Matched-Groups design</p> <p>Natural-Groups design</p> <p>-<i>t</i> Tests</p> <p>-Analysis of Variance (ANOVA)</p> <p>Advanced Experimental Designs</p>	Dr. O. A. Otekunrin

		<ul style="list-style-type: none"> -Repeated measures designs -Practice effects -Counterbalancing -Latin Square Design -Complex designs -Mixed designs -Solomon Four-Group Design -Quasi-experimental designs 	
4.15pm – 4.45pm	30mins	Questions & Answers	Mr. Iredele Ogunbayo / Moderator
4.45pm – 5.00pm	15mins	Break	All
5.00pm – 5.05pm	5mins	Session Resumption	Mr. Iredele Ogunbayo / Moderator
5.05pm – 6.25pm	80mins	<ul style="list-style-type: none"> -t Tests in R -Analysis of Variance (ANOVA) in R -Repeated-measures ANOVA in R -Mixed design ANOVA in R 	Mr. O. J. Akintande
6.25pm – 7.00pm	35mins	Questions/Answers & Closing	Mr. Iredele Ogunbayo / Moderator