Research Writing, Sampling Techniques and Statistical Analysis In-depth Seminar Workshop - October 11 to 15, 2021

Course Description:

A five-day workshop via Zoom. Research writing has been an integral part of our daily life. Whether you are working in the public sector, private sector and academe, the research writing process is the same.In fact the whole research process is constant accross the sector. In the research writing portion of this workshop, participants will learn how to structure a research paper, write a statement of the problem, writing literatures/citation and many more. On the second part of research writing, participants will engage to a whole-day writeshop.

The third day of the workshop will deal with sampling Techniques, data collection and data preparation. On the last two days of workshop, participants will learn how to interpret data using JASP and JAMOVI (these are freewares).

Course Objectives:

1. Learn how to write a research paper.
2. Enable participants on identifying the right sampling techniques in accordance to the research problem and research design.
3. Learn how to interpret statistical data using FREEWARES (JASP and JAMOVI).

Course Outline

Day 1

• Planning Research Work
• Structuring Research Paper/ Research Work
-Title
-Abstract
-Keywords
-Introduction
-Methods
-Results & Discussion
-Conclusions
-Recommendations
-Acknowledgement
-References
-Supporting Materials
• Use of Proper Scientific Language
• How to Publish, Ethics, & Plagiarisms

Day 2 – Whole-day of Write shop

Day 3 – Sampling, Data Collection and Data Preparation

• Understanding survey design
• Basics of Sampling
-Role of Sampling in Statistical Inference
-Introduction to probabilistic sampling techniques
-Introduction to non-probabilistic sampling techniques
-Choosing the best sampling techniques
• Techniques on effective questionnaire
-Questionnaire Construction
-Pre-test
• The Cronbach's Alpha (Reliability test)
• Data Coding, Entry and checking
• Preparing Data for Analysis

Day 4 – Statistical Analysis

*Introduction to Jasp and JAMOVI
*Data Encoding using JAMOVI
*Running and Interpreting Frequencies using JAMOVI
*Introduction to basic statistics:mean, median, mode and normal distribution
*Identifying and treating outliers in a distribution

Day 5 – Statistical Analysis Part 2

*Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau
*Test of difference: Paired t-test and Wilcoxon signed-rank
*Comparison of Means (2 groups): Independent T-test and Mann-whitney U test
*Comparison of Means(More than 2 groups): One-way ANOVA and Kruskal Walis-H

PROGRAM OF ACTIVITIES: RESEARCH WRITING, SAMPLING TECHNIQUES AND STATISTICAL ANALYSIS IN-DEPTH SEMINAR WORKSHOP

Day 1: Basics

Opening of the workshop (Doxology, National Anthem and opening remarks)	8:45AM to 9:00AM
Introduction to Research	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Planning Research Work	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
• *Structuring Research Paper/ Research Work*	1:01PM to 2:30PM

-Title *-Abstract* *-Keywords* *-Introduction* *-Methods* *-Results & Discussion* *-Conclusions* *-Recommendations* *-Acknowledgement* *-References* *-Supporting Materials*	
• Use of Proper Scientific Language • How to Publish, Ethics, & Plagiarisms	2:31PM to 4:00PM
Dismiss	

Day 2: Workshop (Writeshop and Critiquing)

Admission to Zoom	8:45AM to 9:00AM
Writeshop and Critiquing Session 1	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Writeshop and Critiquing Session 2	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
Writeshop and Critiquing Session 3	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Writeshop and Critiquing Session 4	2:46PM to 4:00PM
Dismiss	

Day 3: Sampling, Data Collection and Data Preparation

• Understanding survey design	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
• Basics of Sampling -Role of Sampling in Statistical Inference -Introduction to probabilistic sampling techniques -Introduction to non-probabilistic sampling techniques -Choosing the best sampling techniques	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
• Techniques on effective questionnaire -Questionnaire Construction -Pre-test	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
• The Cronbach's Alpha (Reliability test) • Data Coding, Entry and checking • Preparing Data for Analysis	2:31PM to 4:00PM

Dismiss

Day 4: Statistical Analysis

*Introduction to Jasp and JAMOVI *Data Encoding using JAMOVI	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
*Running and Interpreting Frequencies using JAMOVI	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
*Identifying and treating outliers in a distribution	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
**Continuation of the discussion*	2:31PM to 4:00PM
Dismiss	

Day 5: Workshop

*Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
*Test of difference: Paired t-test and Wilcoxon signed-rank	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
*Comparison of Means (2 groups): Independent T-test and Mann-whitney U test	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
*Comparison of Means(More than 2 groups): One-way ANOVA and Kruskal Walis-H	2:31PM to 4:00PM
Dismiss	

THE SPEAKERS:

DR. ALDRIN P. ANTIVOLA

- **Doctor of Education (Ed.D) Major in Educational Management (With Highest Distinction) –** Equivalent to Latin Honors of Summa Cum Laude Graduate School of Education, Arts and Sciences GSEAS De La Salle University-Dasmarinas, March 2004
- **Master's in Business Administration (MBA) -** Ateneo de Manila University – Regis University MBA Program of Regis University, Denver, Colorado, U.S.A. Ateneo de Manila University Graduate School of Business AGSB, June 2000
- **Twenty-five years in service to the academe as part-time faculty**
- **Consultant and Coach in the field of Business and Management**
- **Published numerous researches**

JEROME L. BUHAY

- Researcher/Statistician/Consultant
- Professor at De La Salle University – Dasmariñas
- PhD in Mathematics Education (Ongoing)
- PhD in Statistics (with earned units)
- Master of Arts in Mathematics
- BS in Applied Mathematics maj. In Statistics

REQUIRED SOFTWARE FOR THIS WORKSHOP:

- **Zoom**
- **Jasp (Freeware Statistical Software)**
- **JAMOVI (Freeware Statistical Software)**
- **Gmail account for Google Classroom**
- **Raosoft.com**