



**TO : DR. ROGELIO B. ANIEZ JR.
DEAN, COLLEGE OF ENGINEERING**

**SUBJECT: NARRATIVE REPORT OF COLLEGE OF ENGINEERING FACULTY AND STUDENT
DEVELOPMENT FROM AUGUST 2022 TO JANUARY 2023**

**Title of Training and Workshop : Basic & Statistical Tools for Research and Capstone Design
Project using Jamovi and G-Power Software**

Name of Speaker/Trainer : Jerome L. Buhay

Date : December 01, 2022

Time : 9:00am to 5:00pm

Venue : MS Teams

**Number of Participants (faculty : 108
members and students)**

Narrative: This training and workshop aims to provide information on some statistical principles that is highly applicable to the field of engineering research and capstone design project with the aid of software that fits the description of use. A conference group was created using MS Teams to hold the training and workshop session with this link: https://teams.microsoft.com/l/meetup-join/19%3ameeting_OGViYWQ5ZTA0OGQxZi00MDRiLWEzZTEtMTk2NjUyNWZhZTA0%40thread.v2/0?context=%7b%22Tid%22%3a%221d981f77-3ca3-46ae-b0d4-e8044e6c7f84%22%2c%22Oid%22%3a%2226b60a59-351e-403b-bf2b-0e47f6573452%22%7d.

The master of ceremony is Engr. Shane Garcia while the technical committee are some officers of PICE NUSC and ESC. The first half of the training, from 9:00am to 12:00pm discussed some concepts and principles used in G-Software. On the other hand, from 1:00pm to 4:00pm goes to the discussion of related concepts and principles used in Jamovi. The participants are requested to answer an evaluation form through MS Forms to receive their respective e-certificates powered by Microsoft Power Automate constructed by the coordinator itself. Most of the evaluations given to the speaker/trainer and the workshop itself on the evaluation form were given a rating of 5, with a 5 being the highest (see the attached MS Forms Evaluation Results). This means the participants are highly satisfied to the conducted activity. The invitation, program flow, e-certificate, and some pictures of the training and workshop are attached in this report.

Invitation Letter:

November 22, 2022

MR. JEROME L. BUHAY
DLSUD

Dear Mr. Buhay,

In keeping with the vision of the National University (NU), Philippines to be known internationally in education and research, we, at the NU - College of Engineering have decided to undergo a series of training and workshop that will enhance the skills of the faculty members and students in the field of engineering. I, Engr. Nioro G. Furiscal, have been appointed by the Dean to Chair the Training and Workshop Committee.

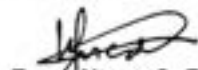
May I formally invite you to be part of this training/workshop as our **mentor/speaker**. It will be an honor to have you, knowing that your expertise in the use of Jamovi and G-power software in the application of basic statistical tools for research and capstone design project, can impart knowledge and interest to our faculty members.

Please be informed that the training/workshop is scheduled on Thursday, 1 December 2022. In this regard, may I request the items below to be forwarded to us on or before Wednesday, 23 November 2022.

1. Curriculum vitae
2. Short Bio note
3. Formal picture to be used for the pubmat

Thank you very much and I look forward to having you at the event.

Sincerely,



Engr. Nioro G. Furiscal, CE, MES, LM.PICE, M.ASEP
Event Chair

*Faculty, College of Engineering,
National University,
Manila, Philippines*

Speaker's CV / Short Bionote:



JEROME L. BUHAY

Block 110 Lot 15 Phase 3 Tierra Nevada, San Francisco
City of General Trias, Cavite Philippines
Date of Birth: March 29, 1972
Mobile Phone Number : (063)-9166177901
Email: jeromelbee@yahoo.com, jlbuhay@dlsud.edu.ph

WORK EXPERIENCE

☞ **Working as an Assistant Professor (June 1999 up to Present)** at the Mathematics and Statistics Department, College of Science, De La Salle University – Dasmariñas, City of Dasmariñas, Cavite Philippines.

- ☞ Teaching Statistical Analysis in Business- Graduate School of Business , DLSU - Dasmariñas
- ☞ Teaching Statistics in Criminology – Graduate School- College of Criminology and Law Enforcement, DLSU - Dasmariñas
- ☞ Teaching Mathematics Subjects like Elementary Statistics, Engineering and Probability Statistics, Business Statistics, Introduction to Statistical Quality Control, Advance Statistics, Introduction to Probability Theory, Mathematics of Investment, Quantitative Techniques, Algebra, Trigonometry and Calculus.
- ☞ Consultant- Statistical Processes in various industries
- ☞ Department Chair - Mathematics and Statistics Department (2018-2019)
- ☞ Resource Speaker – Strand Asia– Statistics Seminars and Workshops - 2020
- ☞ Resource Speaker/ Consultant – Strat One 2021- present

Pubmat:

The poster features a dark blue background with a grid of white numbers and percentages, resembling a data table. A large, stylized orange and yellow graphic element is on the right side. The text is arranged in a clear, hierarchical layout.

 NATIONAL UNIVERSITY
COLLEGE OF ENGINEERING

TRAINING AND WORKSHOP SERIES

***BASIC & STATISTICAL TOOLS FOR RESEARCH
AND CAPSTONE DESIGN PROJECT USING
JAMOVI AND G-POWER SOFTWARE***

WITH

JEROME L. BUHAY

STATISTICS PROFESSOR
ASSISTANT PROFESSOR
DLSU DASMARIÑAS
STATISTICIAN
DATA ANALYSIS AND
TRAINING CENTER



**ON 01 DECEMBER, 2022
VIA MS TEAMS
9:00 AM TO 5:00 PM**

Program Flow:

BASIC & STATISTICAL TOOLS FOR RESEARCH &
CAPSTONE DESIGN PROJECT USING
JAMOVİ AND G-POWER SOFTWARE

TRAINING AND WORKSHOP SERIES



NATIONAL UNIVERSITY
COLLEGE OF ENGINEERING

**PROGRAM FLOW
(SESSION 1)**

REMINDERS	9:00 AM - 9:10 AM
INVOCATION	9:10 AM - 9:15 AM
NATIONAL ANTHEM	9:15 AM - 9:20 AM
WELCOMING REMARKS <i>Dr. Rogelio B. Aniez Jr.</i>	9:20 AM - 9:30 AM
INTRODUCTION OF THE SPEAKER <i>Engr. Nirola G. Furlscal</i>	9:30 AM - 9:40 AM
SESSION 1 PROPER <i>Mr. Jerome L. Buhay</i>	9:40 AM - 12:00 PM
LUNCH BREAK	12:00 PM - 1:00 PM

**PROGRAM FLOW
(SESSION 2)**

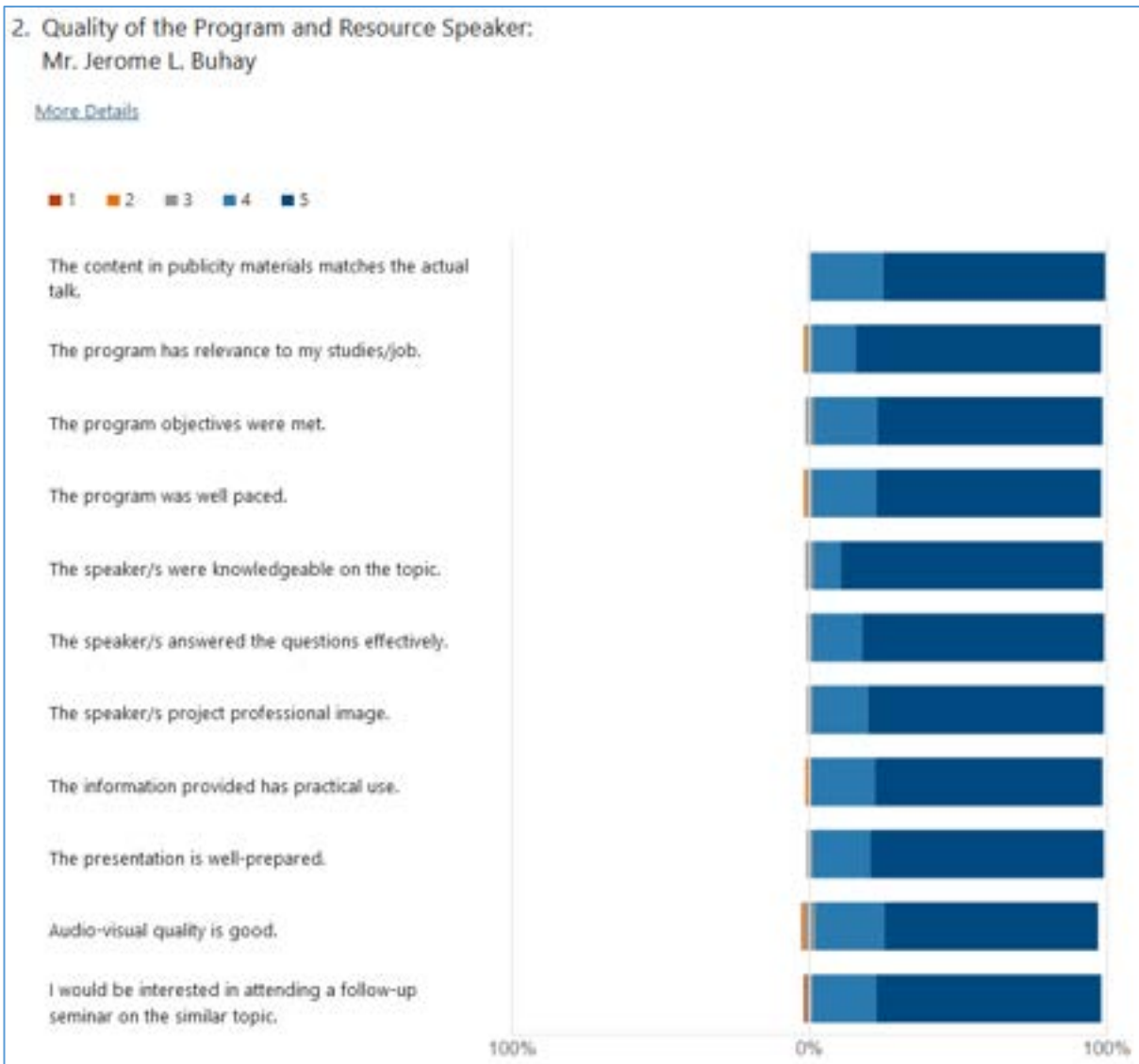
REMINDERS	1:00 PM - 1:10 PM
SESSION 2 PROPER <i>Mr. Jerome L. Buhay</i>	1:10 PM - 4:00 PM
QUESTION & ANSWER	4:00 PM - 4:40 PM
AWARDING OF CERTIFICATE	4:40 PM - 4:45 PM
CLOSING REMARKS <i>Engr. Nirola G. Furlscal</i>	4:45 PM - 4:55 PM
NU HYMN	4:55 PM - 5:00 PM

Engr. Shane Francis B. Garcia
Master of Ceremony

E-Certificate of the Speaker:



MS Forms Evaluation Results:



3. Comments and suggestions:

[More Details](#)

[Insights](#)

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Responses

Latest Responses:

"None"

[Update](#)

12 respondents (19%) answered **None** for this question.



4. Future webinar topics that you would want to see:

[More Details](#)

[Insights](#)

60

Responses

Latest Responses:

"Mathematical Modelling on Capstone Design Simulation"

[Update](#)

9 respondents (15%) answered **Softwares** for this question.



Screenshots of the Training and Workshop Proper:



Table 1

Table. Sources of Error in Survey Research and Strategies to Reduce Error

Type of error	Source of error	Strategies to reduce error
Coverage error	Unknown or zero chance of individuals in the population being included in the sample	Multimode design
Sampling error	Individuals included in the sample do not represent the characteristics of the population	Clearly identified population of interest; diverse participant recruitment strategies; large, random sample
Measurement error	Questions/instruments do not accurately reflect the topic of interest; questionnaires/interviews do not elicit truthful answers	Valid, reliable instruments; pretest questions; user-friendly graphics; visual characteristics
Nonresponse error	Lack of response from all individuals in sample	User-friendly survey design; follow-up procedures for nonresponders

Note. Information from Dillman et al. (2004), Singleton & Straits (2009), Check & Schutt (2012).

Sources of Error in Survey Research and Strategies to Reduce Error

J Adv Pract Oncol. 2015 Mar-Apr; 6(2): 168-171.
 Published online 2015 Mar 1.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4601887/bgaw/71>

Pearson correlation coefficient r

Pearson Correlation coefficient is a **numerical value** that measures strength and direction of linear relationship

Symbol: r

- ✓ r can range from -1.0 to +1.0
- ✓ Sign (+/-) indicates “**direction**”
- ✓ Value indicates “**strength**”
- ✓ Measures a “**linear**” relationship only
- ✓ **Significance of the Pearson r can be tested using t-test**

One-Way ANOVA

Dependent Variable: Program Policy

Source: Program Policy

Sum of Squares: 10.000

df: 1

Mean Square: 10.000

F: 2.000

Sig.: .167

Partial Eta Squared: .167

Linearity

Model

Sum of Squares: 10.000

df: 1

Mean Square: 10.000

F: 2.000

Sig.: .167

Partial Eta Squared: .167

Constant

Sum of Squares: 59.000

df: 1

Mean Square: 59.000

F: 11.800

Sig.: .001

Partial Eta Squared: .667

Total

Sum of Squares: 69.000

df: 3

Mean Square: 23.000

F: 4.600

Sig.: .014

Partial Eta Squared: .667

Error

Sum of Squares: 49.000

df: 2

Mean Square: 24.500

F: 4.900

Sig.: .014

Partial Eta Squared: .667

Total Corrected

Sum of Squares: 59.000

df: 3

Mean Square: 19.667

F: 3.933

Sig.: .014

Partial Eta Squared: .667

Error Corrected

Sum of Squares: 49.000

df: 2

Mean Square: 24.500

F: 4.900

Sig.: .014

Partial Eta Squared: .667

Total Variance

Sum of Squares: 69.000

df: 3

Mean Square: 23.000

F: 4.600

Sig.: .014

Partial Eta Squared: .667

Error Variance

Sum of Squares: 49.000

df: 2

Mean Square: 24.500

F: 4.900

Sig.: .014

Partial Eta Squared: .667

Post Hoc Tests

Tukey Post Hoc Test – Program Policy

	HS	College	MSU
HS		Mean Difference = -.0000	-0.0000
		p-value = .9999	0.0000
College	Mean Difference = -.0000		-0.0000
		p-value = .9999	0.0000
MSU	Mean Difference = .0000		
		p-value = .9999	

Tukey Post Hoc Test – Standard and Condition

	HS	College	MSU
HS		Mean Difference = -.0000	-0.0000
		p-value = .9999	0.0000
College	Mean Difference = .0000		0.0000
		p-value = .9999	0.0000
MSU	Mean Difference = .0000		
		p-value = .9999	

Tukey Post Hoc Test – Program Implementation

	HS	College	MSU
HS		Mean Difference = -.0000	0.0000
		p-value = .9999	0.0000
College	Mean Difference = .0000		0.0000
		p-value = .9999	0.0000
MSU	Mean Difference = .0000		
		p-value = .9999	



Prepared and submitted by:

ENGR. NIORO G. FURISCAL, *MES, MSCE-Structural (CAR)*
COORDINATOR, COLLEGE OF ENGINEERING FACULTY AND STUDENT DEVELOPMENT
PROGRAM COORDINATOR, CIVIL ENGINEERING DEPARTMENT
FACULTY MEMBER, CIVIL ENGINEERING DEPARTMENT
NATIONAL UNIVERSITY - MANILA