



**Tentative Training-Workshop Outline**  
**Training-Workshop on Statistics for Research Teaching, Advising,**  
**and Paneling**  
**April 29-May 1, 2026**  
**Castle Peak Hotel, Cebu City, Philippines**

**Objectives of the Training-Workshop:**

- (1) *To strengthen faculty competence in teaching statistical concepts and research data interpretation effectively;*
- (2) *To learn the practical application of statistical methods using open-source software;*
- (3) *To guide students in the selection of appropriate statistical tests aligned with research design and variables; and*
- (4) *To critically evaluate the role of AI applications and tools in streamlining statistical analysis as teachers, advisers and panelists.*

**Requirement:**

*Participants should bring a laptop and mobile/pocket wi-fi for the discussion, exercises and workshops.*

**DAY 1: 29 April 2026**

8:00 am- 5:00 pm

***Arrival of Participants***  
***Pre-registration and distribution of training kits***

**DAY 2: 30 April 2026**

8:00 am- 9:00 am

***Registration and distribution of training kits***

9:01 am-9:15 am

**2015** Opening Program Invocation  
 National Anthem  
 Introduction to the Resource Speaker

9:16-10:30 am

Session 1

SEC Registration No.  
CN201619200



1-2F Montblanc Building,  
Burgos-Chaves Sts.,  
Cagayan de Oro City,  
Philippines



<http://aseanresearch.org/astir>



<http://facebook.com/astir2016>



[astir@aseanresearch.org](mailto:astir@aseanresearch.org)



+63 (088) 323 4282  
+639 177217448





SEC Registration No.  
CN201619200



1-2F Montblanc Building,  
Burgos-Chaves Sts.,  
Cagayan de Oro City,  
Philippines



[http://aseanresearch.org/  
astr](http://aseanresearch.org/ast)



[http://facebook.com/  
ast2016](http://facebook.com/ast2016)



[astr@aseanresearch.org](mailto:astr@aseanresearch.org)



+63 (088) 323 4282  
+639 1772 17448



## **Core Statistical Concepts for Research Teaching**

*Data types and measurement scales  
Descriptive vs. Inferential Statistics  
Hypothesis testing fundamentals  
Effect size and confidence intervals  
Common statistical misconceptions among  
research students*

10:31-12:00 nm

Session 2

### **Open-Source Software in Statistics**

*Why use open-source software?  
Introduction to open-source software: JASP/JAMOVI  
Guided Installation and tour of user interface*

12:01-1:00 pm

**LUNCH BREAK**

1:01 pm –3:00 pm

Session 3

2015

### **Data Visualization for Research Interpretation**

*Principles of effective data visualization  
Choosing the right graph for the right data  
(bar charts, histograms, scatter plots)  
Visualization for thesis defense and research reporting*

3:00 pm – 4:30 pm

Session 4

### **Inferential Statistics for Research Advising**

*The logic of hypothesis testing  
Understanding p-values and confidence intervals  
Interpreting statistical outputs for research  
conclusions*

4:31 pm – 5:00 pm

**Open Forum/Sharing New Learning and Insights**



SEC Registration No.  
CN201619200



1-2F Montblanc Building,  
Burgos-Chaves Sts.,  
Cagayan de Oro City,  
Philippines



<http://aseanresearch.org/ast>



<http://facebook.com/ast2016>



[ast@aseanresearch.org](mailto:ast@aseanresearch.org)



+63 (088) 323 4282  
+639 1772 17448



**Day 3: 1 May 2026**

8:00 am - 8:45 am

8:45 am - 9:00 am

9:01 am – 10:30 am

10:31-12:00 nn

12:01 pm – 1:00 pm

1:01 pm – 2:30 pm

**Opening Program**

Invocation  
National Anthem  
Synthesis of Day 2

Session 5

***Exploring Relationships: Correlation and Regression***

*Understanding the difference between correlation and causation  
Simple Linear Regression: Predicting an outcome based on a single predictor  
Interpreting regression outputs*

Session 6

***Non-Parametric Alternatives***

*When to use non-parametric tests?  
Introduction to common non-parametric tests*

**LUNCH BREAK**

Session 7

***Interpreting Results in Research Writing***

*Translating statistical output into clear, concise, and defensible research findings.  
Writing an effective results and discussion section*



SEC Registration No.  
CN201619200



1+2F Montblanc Building,  
Burgos-Chaves Sts.,  
Cagayan de Oro City,  
Philippines



<http://aseanresearch.org/astr>



<http://facebook.com/astr2016>



[astr@aseanresearch.org](mailto:astr@aseanresearch.org)



+63 (088) 323 4282  
+639 1772 17448



2:30 pm – 4:30 pm

Session 8

**Role of AI in Statistical Analysis**

*Introduction of AI applications and tools for Data analysis  
Leveraging AI for data cleaning, pattern recognition, and hypothesis generation  
Teaching and monitoring students in the responsible use of AI as research teachers, advisers and panelists*

4:01 pm – 5:00 pm

Feedback  
Open Forum/Sharing New Learnings and Insights  
Presentation of Certificates  
Closing Program

**ASTR, Inc. Institutional Members**

