

# Course for Statistical Design and Analysis for M. Sc. Agriculture

Designed for Biological Science students of IAAS/TU, Kathmandu, Nepal

## Objectives:

- Familiarize use of different types of statistical designs applicable in various biological sciences.
- Familiarize statistical analysis of different experimental designs
- Familiarize correlation and regression and their analysis
- Understanding and skill development on different types of graphics, data interpretation, and manuscript preparation

**Tools:** R packages, Sigma plot, and Mendeley Referencing

## Course Outline:

SN	Course	Date
1	Explain the importance and principles of replication, randomization, and experimental error, and demonstration of data analysis for different kind of experimental designs using R packages	10 Nov/24 Kartik
2	Explanation of the importance and principles of correlation and regression, and demonstration of correlation and different kind of regressions using R packages	11 Nov/25 Kartik
3	Demonstration of different graphic techniques using Sigma Plot and R packages	12 Nov/26 Kartik
4	Referencing using Mendeley, result tabulation, and writing discussion for a scientific paper	13 Nov/27 Kartik
5	10 minute presentation by different groups of students from the own exercises datasets	14 Nov/28 Kartik

**Time:** 10 to 12 am (2 hour) every day.

**Resource person:** Dr. Krishna Devkota, IRRI Scientist/Nep

**Training venue:** Seminar Hall of Central Dept of Physics. Kirtipur/TU

Everybody is required to bring her/his personal lap-top computer with power cable cord.