

COURSE CODE: STS 494

COURSE TITLE: STATISTICAL INFERENCE III LABORATORY

NUMBER OF UNIT: 1 UNIT

COURSE DURATION: ONE HOUR PER WEEK.

COURSE COORDINATOR: MR G.A. DAUDU

LECTURER OFFICE LOCATION: AMREC

COURSE DETAILS:

Standard estimation procedures for statistical tests, Test of normality, Goodness of fit test, Analysis of contingency tables and non-parametric test. Use of R – package in hypothesis testing and confidence intervals estimation.

COURSE REQUIREMENTS:

This is a compulsory course for all statistics students. Students are expected to have a minimum of 75% attendance to be able to write the final examination.

READING LIST:

1. J.A. Rice, Mathematical Statistics and Data Analysis, Third Edition, 2007.
2. L.J. Bain and Engelhardt, M., Introduction to probability and mathematical statistics, 1992.
3. C. Chatfield, Statistics for technology: a course in applied statistics, Third Edition, 1983.

LECTURE NOTES

Aims & Learning Objectives:

Aims: Introduce classical estimation and hypothesis testing-testing principle

Objective: Ability to perform standard estimation procedures and tests on normal data. Ability to carry out goodness-of –fit tests, analysis of contingency tables, and carry out non-parametric tests. Ability to use R to calculate estimates, carry out hypothesis tests and compute confidence intervals.

Content:

Using R package to analyse and interpretation of data in general linear hypothesis, analysis of linear models, hypothesis extension of uniparameter result to multiparameter situation and other distributions.