

SCS2111 : Laboratory II – Statistical Methods using R

Lecturer: Dr. Champa Magalla

Teaching Assistant: Ms. Deshanee Wickramarachchi

Duration: 7 hours



Day and time: Lecture	Thursday 10.00 – 11.00am
Laboratory session 1	Thursday 11.00am-1.00pm
Laboratory session 2	Thursday 1.00pm-3.00pm

Course content:

- Introduction
- Descriptive Statistics
- Estimation Theory and Testing
- Simple Linear Regression & Correlation
- Multivariate Data Analysis (if time permits)

Aim of the course:

To provide an understanding of how to explore and describe various real-life data sets, using R.

Some References:

- Introduction to Mathematical Statistics by Robert V. Hogg and Allen T. Craig
- Computational Statistics by Geof H. Givens and Jennifer A. Hoeting (February 2005)
- Elements of Computational Statistics by James E. Gentle (2002)
- Draper, N.R. and Smith, H. (1998) Applied Regression Analysis, 3rd edn, New York: John Wiley & Sons.

Method of Assessment:

- Written examination after completion of lectures (50%)
- Assignments (50%)

Objectives of the Course

After the completion of this course the student will be able to understand the data and use an appropriate data analysis method to meet an objective under consideration, and perform the analysis using R software. **The course will be conducted using R.**