University of Sri Jayewardenepura

Department of Food Science and Technology

FST 254 1.0 Computer Applications for Food Sciences III

Duration: 30 lecture hours

Pre-requisites: FST 252 1.0 Computer Applications for Food Sciences I
FST 284 1.0 Statistics for Food Sciences I
Students should follow the course unit FST 294 1.0 -
'Statistics for Food Sciences II' parallel to this course.

Lecturer in charge: Ms. Thiyanga Talagala
Department of Statistics and Computer Science

Learning objectives:

- Remind concepts and techniques to carry out a preliminary data analysis by obtaining descriptive statistics.
- Introduce concepts and techniques required to carry out an advanced statistical analysis by applying suitable techniques.
- Introduce concepts and techniques required to write a statistical report based on findings of the statistical data analysis.

Course contents:

- Introduction to Statistical Inference
- Estimation
- Hypothesis testing
- Analysis of variance
- Design of experiments
- Non-parametric Inference
- Regression Analysis
- Preparation of Statistical Reports

Learning outcomes:

By the end of the course students should be able to:

- Plan the data analysis.
- Analyze a given dataset by applying suitable statistical techniques. (Both parametric and Non - parametric).
- Write a statistical report on finding of the statistical data analysis.

Method of Assessments:

1. Mid semester examination – 20%
2. Semester terminal examination – 80%

Recommended reading materials:

- Data Analysis with SPSS Version 16
  Authors: Robert H. Carver, Stonehill College
  Jane Gradwohl Nash, Stonehill College
  Publisher: CENGAGE Learning

Prepared by Thiyanga S Talagala