



## STUDENT LEARNING OUTCOMES

### COLLEGE OF SCIENCES STATISTICS - B.S.

#### **Discipline Specific Knowledge, Skills, Behavior and Values**

1. Students will demonstrate an understanding of probability and distribution theory.
2. Students will identify and carry out statistical procedures such as regression analysis and analysis of variance.
3. Students will demonstrate an understanding of (i) converting raw data into a form which lends itself to statistical investigation by appropriate statistical software (e.g., convert raw data into R data frame that can further be analyzed by R software, convert raw data into SAS data file that can be analyzed by SAS software, etc.) and (ii) applying standard packages/procedures for the appropriate statistical analysis.

#### **Critical Thinking**

1. Students will demonstrate an understanding of probability and distribution theory.
2. Students will identify and carry out statistical procedures such as regression analysis and analysis of variance.
3. Students will demonstrate an understanding of (i) converting raw data into a form which lends itself to statistical investigation by appropriate statistical software (e.g., convert raw data into R data frame that can further be analyzed by R software, convert raw data into SAS data file that can be analyzed by SAS software, etc.) and (ii) applying standard packages/procedures for the appropriate statistical analysis.

#### **Communication**

1. Students will identify and carry out statistical procedures such as regression analysis and analysis of variance.

#### **Assessment of Statistics - B.S. Outcomes**

These outcomes will be assessed using a variety of assessment methods, including:

- Tests/exams
- Projects
- Presentations