## **Course Description**

The following topics will be covered among others: point and interval estimation, transformation of variables, aspects of multivariate statistical analysis, sufficiency, completeness, consistency, unbiasedness, the Cramer-Rao inequality, the Rao-Blackwell theorem, tests of hypotheses including uniformly most powerful tests and likelihood ratio tests

## **Learning Outcomes**

This course is intended to provide an in-depth knowledge of various aspects of statistical inference. Optimal procedures will be developed to solve a variety of problems arising in data analysis.

Classes will begin on January 9th and end on April 10th. Reading Week: February 18th- 26th