Form (H)
Short course description

Course title: T**heory of Statistic (1)**	Course number and code: **STAT 340**
Previous course requirement: STAT 332	Language of the course: E
Course level: Compulsory course in 6th level for statistic and 8th level for OR	Effective hours: 3(2+2+0)

Course description

Parametric Point estimation. Properties of estimators-Unbiasedness-MSE. Consistencies. UMVUE -CR Inequality. Fisher's Information – CRLB- Efficiency. Sufficient Statistic – Completeness. Exponential family. Lehmann-Sheffe theorem. MLE Estimators. Invariance Property- Asymptotic properties. Moments Estimators. Bayes Estimators.

Course objectives

Reviewing the methods and properties of point estimation of parameters

Learning outcomes (understanding, knowledge, and intellectual and scientific skills)
After studying this course, the student is expected to be able to:

-Understand the elements of the estimation problem under investigation.
-Use mathematics for making estimation.
-Make the suitable type of estimation among various inference techniques in the field.
-Demonstrate capability of choosing the appropriate statistical inference for a particular application.
-Formulate significant research questions, use appropriate statistical inference method, and interpret the results.
-Read, evaluate, and interpret numerical, statistical and general scientific information.
-Comparing things should always be performed.
Reaching the appropriate conclusions from the used analysis.

Textbook adopted and supporting references

Title of the book	Author's name	Publisher's name	Date of publication
Introduction to Mathematical Statistics	Hogg, McKean, and Craig	Prentice Hall	Last edition
Introduction to Theory of Statistics	A. Mood, F. Graybill & B. Boes	McGraw Hill	1974
مبادئ الإستدلال الإحصائي	جلال الصياد	دار المريخ للنشر - الرياض	1993