



Course No.	Course Title	No. of Units			Pre-requisites
		Th.	Pr.	Credit	
STAT 211	Theory of Probability	3	1	4	STAT 101 Co requisite MATH 101

Course Objectives:

After finishing the course, the student is expected to be familiar with the following:

- Use probability in random experiment.
- Use probability distributions in problems with an outcome that can't be predicted.
- Follow-up course of random operations in the future.

Course Description:

Random variables, Sample space and events, Rules of probability, Conditional probability, Bayes' Theorem, Mathematical expectation and moments, Probability distribution (discrete and continuous), Moment generating function, Introduction for distribution of several random variables.

Main Text Book:

- Introduction to Probability and Mathematical Statistics, by Lee J. Bain and Max Engelhardt, Second Edition, Duxbury Press, 2000.

Subsidiary Books:

- A First Course in Probability, by Sheldon Ross, 7th edition, Prentice Hall 2005.
- Probability, Random Variables and Stochastic Processes A. Papoulis & S. U. Pillai. 4th edition, Tata McGraw-Hill 2005.
- Introduction to statistics and probability, by Dr. Fair valleys and others, Alrashed Library, 2nd edition 2005.