

## STAT6343 - Experimental Design

[STAT 6343](#) Experimental Design (3 semester credit hours) Basic design principles; sample size computation; crossed and nested treatment factors; confounding; inference on contrasts; analysis of variance; analysis of covariance; designs such as completely randomized designs, factorial designs, complete block designs, incomplete block designs, Latin square designs, crossover designs, repeated measures designs and split plot designs; fractional replication in factorial experiments; variance components models; and implementation of statistical methods using a statistical software package. Prerequisite: [STAT 6337](#) or equivalent. (3-0) T