

(see Course Descriptions for the applicable academic year: <http://www.ucalgary.ca/pubs/calendar/>)

Syllabus

Topics

Simple random sampling, estimators of associated parameters and their properties.
Extension to sampling for proportions and percentages.

Stratified random sampling, estimators of associated parameters and their properties.
Extension to sampling for proportions and percentages.

Ratio estimator, bias and variance of ratio estimator, sample estimation of variance of ratio estimate. Comparison with mean per unit estimator.

Regression estimators, two types of regression estimators, bias and variance of regression estimators, sample estimation of variance of regression estimator. Comparison with other estimators.

Systematic sampling, comparison with stratified random sampling, problems of linear trend, and/or periodic variations. Variance of the estimated mean and sample estimate thereof.

* * * * *