

Final exam will be written Wednesday, April 22, in Grant Hall, Main Floor, from 14:00 till 17:00

Books and lecture notes are not permitted

Paper will be provided. Bring in your pocket calculators, CASIO 991 or similar

Information meeting will be held Tuesday, April 21, in Jeffery Hall room 422, from 13:30 till 14:30

Students are advised to review the following topics:

Unbiased estimators. Best unbiased estimators. Consistency and the Law of large numbers. The Central limit theorem

The method of moments and maximum likelihood estimates. Confidence intervals based on these estimates

Interval estimation of means, differences between means, proportions, differences between proportions, variances, and ratios of two variances

Tests concerning means, variances, and proportions. Significance level of a test. Probabilities of type I and II errors.  $P$ -values

Tests concerning differences between means, ratios of two variances, and differences between two proportions

Multiple linear regression, its matrix formulation

Least squares estimates and their variance-covariance matrix using matrix formulation

Estimates of linear functions of regression parameters, in particular, means responses

Unbiasedness of these estimates and their variance

Confidence intervals and tests of hypotheses concerning linear functions of regression parameters

One-way designs. Randomized-block designs. Box plot