

The second exam will be administered on **Thursday, March 21<sup>st</sup> as an online exam through Canvas. You will need to have the Respondus “Lockdown” browser installed and have a webcam for the exam.** The exam will be Excel based problems covering material in Section 4 of the “Lecture Notes.” You may use notes such as the Lecture Notes or lecture PowerPoint slides, but these must be in print form.

I will post a set of example problems on the class website like those I have given on previous midterm exams.

Be able to construct Confidence Intervals and conduct Hypothesis Tests assuming random variables follow a Normal Distribution or that the Central Limit Theorem applies for:

Single Sample Problems

A population mean, assuming a known or unknown variance.

A population proportion assuming a large sample using the Normal approximation to the Binomial distribution.

A population variance.

Two Sample Problems

The difference between two population means, dependent samples (matched pairs).

The difference between two population means:

Assuming known variances

Assuming unknown but equal variances

Assuming unknown variances **NOT** assumed equal, with given degrees of freedom

The difference between two population proportions (large samples) using the Normal approximation to the Binomial distribution.

The equality of two population variances.