## M358K: Topics for the Final Exam

☐ Bar plots and pie charts.
☐ Histograms: modality, skewness.
☐ Measures of center: mean, median.
☐ Measures of spread: IQR range, variance, standard deviation.
□ Box plots.
□ Stacked dot plots.
□ Sampling.
□ Experiments.
☐ The sample mean: the normal case
□ Point estimates and sampling variability.
☐ Confidence intervals: the general principles
☐ Confidence intervals: the normal case with an unknown mean and known standard deviation
☐ Hypothesis testing: the general principles
☐ Hypothesis testing: the normal case with an unknown mean and known standard deviation
☐ The power of the test.
☐ A single proportion: Confidence intervals.
☐ A single proportion: Hypothesis testing.
☐ Two proportions: Confidence intervals.
☐ Two proportions: Hypothesis testing.
$\square$ The $\chi^2$ -distribution.
☐ The goodness-of-fit test.
$\Box$ The $\chi^2$ -test of independence.
□ t-procedures: Single mean: Confidence intervals.
□ t-procedures: Single mean: Hypothesis testing.

$\square$ t-procedures: Two means: Confidence intervals.
$\Box$ t-procedures: Two means: Hypothesis testing.
□ Correlation.
$\square$ Simple linear regression.