

Week 1: Introduction and one sample parametric test on mean

L1 Introduction to statistical tests

L2 One sample t-test

L3 Paired sample t-test and Z-test

Week 2: Hypothesis test

L4 Critical value and rejection region

L5 Power and sample size

L6 Confidence intervals

Week 3: One sample non-parametric test on mean

L7 Non-parametric tests: binomial test

L8 Non-parametric tests: sign test

L9 Wilcoxon signed-rank test

Week 4: Two sample test on means

L10 Transforming data to symmetry

L11 Two sample test: t-test

L12 Two sample test: Wilcoxon rank-sum test

Week 5: Test on variances

L13 Chi-square and F- tests

L14 Experimental design

L15 One way ANOVA test I

Week 6: One way analysis of variance (ANOVA)

L16 One way ANOVA test II

L17 Individual comparison

L18 The Kruskal-Wallis test

## Week 7: Two way ANOVA I

L19 Two way ANOVA test I

L20 Two way ANOVA test II

## Week 8: Two way ANOVA II

L21 The Friedman test

L22 Two way ANOVA test with replicates

## Week 9: Regression Analysis I

L23 Regression analysis: least squares

L24 Regression analysis: robust method

L25 Regression analysis: estimation and inference

## Week 10: Regression Analysis II

L26 Regression analysis: ANOVA and prediction

L27 Regression and correlation

## Week 11: Chi-square goodness-of-fit test I

L28 Chi-square test for categorical data

L29 Chi-square test for discrete distribution

## Week 12: Chi square goodness-of-fit test II

L30 Chi-square test for continuous distribution

L31 Chi-square test for homogeneity and independence

## Week 13: Revision

L32 Revision

L33

L34 Past examination papers