

Statistics 514: Design of Experiments

Topic 7c Summary

Sample Size Calculation

- Want power for F -test
- F -ratio has non-central distribution under alternative hypothesis.
- Determine scenario (smallest practically significant difference). Specify:
 - cell means
 - minimum distance to detect
 - percentage increase in standard deviation
 - confidence interval(s) on contrast
- Use OCC curves or SAS.
- Different for fixed vs. random effects