

Warning!!! These study questions cover ONLY material that has not yet been covered on an exam. The Final Exam covers ALL material in the course, so you must use the first two sets of study questions also!!!!

Within with replications

1. What are the options for handling replications by each subject in a completely within-subject design? What are the different questions or issues which the options address?

Mixed designs

1. Know how to calculate a mixed design ANOVA and how to conduct follow-up tests using correct error terms,.
2. What is a mixed design? How are mixed designs like the nested designs we covered earlier in the course?
3. What assumptions are made in a mixed design? Which significance tests are sensitive to the sphericity assumption? Which are robust? What can be done if sphericity is violated?
4. What is the linear model for a mixed design? What are the error terms in a mixed design?

Unequal-n Nonorthogonal designs

1. Why are unequal-n designs referred to as "nonorthogonal"?
2. Explain the disadvantages of nonorthogonal designs.
3. How does the cause of unequal-n influence how you would analyze the results of a study?
4. Explain the basic idea of using multiple regression to conduct a least squares analysis of a nonorthogonal study.
5. Explain two ways to calculate the marginal means in a two-way unequal-n design, and explain how they differ, and when each way might be preferred.

Latin Squares

1. What are Latin squares used for?