COGS14A Final Review Terms

Please see previous Midterm Review Terms. About 1/3 of the final will cover old material.

REMINDER: Exam review Monday, March 16th at 3:30pm in CENTR 216

Know what a factorial design is.
Be able to say how many factors an experiment has, and how many levels a factor has.

Know how to look at a graph or data table and identify whether or not there is an interaction.

Understand and be able to explain how factorial designs can be within-subjects, between-groups or both (mixed design).

Explain why you might want to use a factorial design.
Explain pitfalls of factorial designs.

What is a quasi-experiment and why might you want to do one?

Be able to identify and describe pre-experimental, nonequivalent groups, time-series, and multiple time-series designs.

What are potential confounds and concerns when doing a quasi-experiment? Which ones are different from doing actual experiments?

How do observational studies differ from people-watching, and when might you want to do an observational study or field experiment?

When would you want to do naturalistic observation vs. participant observation (disguised vs. undisguised) vs. a field experiment vs. a lab experiment? What are the tradeoffs (pros/cons) of these different approaches?

If you observe participants overtly, what can you do to lessen experimenter effects?

What are the confounds to be concerned about in observational/field research?

What kinds of observations can you do?

Understand: narrative records; recoding; checklists; sampling methods
How do single-subject designs differ from case studies? Under what circumstances would you want to do a single-subject design?

What are characteristics of a good baseline, and why are baselines important?

Be able to identify and describe:
Withdrawal designs
Reversal design
Alternating-treatments design
Multiple-baselines design
Changing-criterion design

What are some threats to internal validity in a single-subject design?

What are the benefits and dangers of using physical trace studies and archival data sources?

Understand: Traces vs. products; accretion vs. erosion; natural vs. controlled trace measures; selective survival; selective deposit; continuous vs. discontinuous records; records vs. documents; coding systems

What is “big data” and what kinds of datasets are out there?

What kinds of questions is big data good at answering?

What are some concerns/cautions to keep in mind when using big data resources?