

# Midsemester Check-in + Quiz study tips

# Things the teaching team can do

- Brief review of key ideas from videos during live lecture
- More instruction at beginning of lab
- More guidance on preparing for quiz

# Things you can start / keep doing

- Keep up with and review course materials
  - Use lecture recordings in Sakai for AE solutions + coding
- Attend office hours
  - See office hours schedule on [course homepage](#) (Zoom links in Sakai)

# Tips to prepare for Quiz 02

# Topics (weeks 05 - 08)

- Comparing means with ANOVA
- Multiple comparisons
- Introduction to multiple linear regression
- Inference for regression coefficients
- Types of predictors in regression (categorical, mean-centered, interaction terms, etc. )
- Conditions for multiple linear regression
- Variable transformations (transformation on response variable only)

# Tips

- Review course materials (lectures, AEs, assignment solutions)
- Use readings posted in course schedule for additional examples and practice problems
- Make a page of notes summarizing the material
  - Helps with studying
  - Helps make notes easier to navigate during quiz

# Tips

- Don't just memorize things, ask "why" questions as you review the material
  - Example: We include  $\epsilon$  when we write a statistical model

$$y = \beta_0 + \beta_1 x + \epsilon, \epsilon \sim N(0, \sigma_\epsilon^2)$$

but not when we write the regression equation

$$\hat{y} = \hat{\beta}_0 + \hat{\beta}_1 x$$

Why?