# Psychology 200, Measurement and Data Analysis in Psychology

Neiworth, 2017

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<th>DATE</th>
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| 1/04  | Wednesday     | Experimental Design in Psychology  
AAC: Ch. 1, Displaying the Order in a Group of Numbers Using Tables and Graphs  
Web chapter 1: design issues.  
Overview of the logic and language of psychological research. |
| 1/06  | Friday        | Central Tendency  
AAC: Ch 2, Central Tendency & Variability  
Homework # 1 assigned, due Friday (see Psy 201 assignments for all homeworks). |
| 1/09  | Monday        | Z-Scores, the Normal Curve, Sample vs Population, and Probability  
AAC: Ch. 3, Some Key Ingredients for Inferential Statistics |
| 1/11  | Wednesday     | Continuation of Z-scores, and other ingredients |
| 1/13  | Friday        | Intro to Hypothesis Testing  
AAC: Ch. 4, Introduction to Hypothesis Testing  
Experimental Design Worksheet given today. |
| 1/16  | Monday        | Hypothesis Testing: Z-scores  
AAC: Ch. 5, Hypothesis Testing with Means of Samples |
| 1/18  | Wednesday     | Hypothesis Testing Wrap-Up |
| 1/20  | Friday        | Correlations and Z-scores: a Connection  
AAC: Ch 11, Correlation |
| 1/23  | Monday        | Regression and Survey construction.  
AAC: Ch. 12, Prediction |
| 1/25  | Wednesday     | Correlation and Regression: Wrap-up |
| 1/27  | Friday        | Revisit Design Issues and Working Group – Paper ideas  
Possible review of sampling and survey construction, if we have time! |
| 1/30  | Monday        | Review for first EXAM I: all topics above  
Exam 1 Study Guide in pdf form. |
<p>| 2/01  | Wednesday     | EXAM 1: tables &amp; graphs, experimental design, central tendencies, Z-scores, hypothesis testing, correlation, regression, survey construction |</p>
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| 2/03  | Friday  | Work on paper in groups! Celebrate halfway point!  
Web chapter 2: Applying Stats to Your Own Project (see MOODLE to get this) |
| 2/06  | Monday  | **MIDTERM BREAK – TAKE A BREAK!** |
| 2/08  | Wednesday | t-Tests: They’re fun!  
AAC: Ch. 7, Introduction to t Tests: Single sample and dependent means. |
| 2/10  | Friday  | t Test for independent means  
AAC: Ch. 8, the t-Test for Independent Means |
| 2/13  | Monday  | Basics: ANOVA.  
AAC: Ch. 9, Introduction to ANOVA, focus on the Structural Model  
Formula Handout Given: t-tests and simple ANOVA’s. |
| 2/15  | Wednesday | Factorial ANOVA  
AAC: Ch. 10, Factorial ANOVA |
| 2/17  | Friday  | FACTORIAL ANOVA (cont)  
AAC: Ch. 10, Factorial ANOVA |
| 2/20  | Monday  | Interaction Effects – graphing them! Interpreting them! |
| 2/22  | Wednesday | Repeated measures ANOVA and mixed models..  
Web chapter 3: repeated measures ANOVA (see MOODLE to get this). |
| 2/24  | Friday  | wrap-up all ANOVAs and Interpretations. Post-hoc tests.  
Finish up Ch. 9-10. Interpretation of Interaction effects. |
Ch. 6: Effect size, power, and decision errors. |
| 3/01  | Wednesday | Begin Nonparametrics.  
AAC: Ch. 13, Chi-Square Tests  
AAC: Ch. 14, Nonparametric Tests.  
Formula Sheet: and HELP sheet: ANOVA and nonparametrics |
| 3/03  | Friday  | Complete Nonparametrics.  
Exam 2 Study Guide given here. |
| 3/06  | Monday  | General Review for Exam 2. |
| 3/08  | Wednesday | **EXAM 2: t tests, ANOVA (fixed, repeated measures, mixed), posthoc tests, power, effect size, meta-analyses, nonparametric tests.** |
| 3/10  | Friday  | Paper reviews and feedback in small groups in class. And party! |

Note that the exams will contain problems for which you will need to use the computers in the Mac Lab. Therefore, there will be no other options for self-scheduling. Extended times may be offered for people who have demonstrated through the student support services such a need, but a special exam time may need to be
planned. I will provide extra time by starting people early on the same day (1a) and letting them continue through 2a.

Paper due: Wednesday, March 15 by noon. Please put in assignment dropbox on moodle by noon.