PSYC 3256 E 01: DESIGN AND ANALYSIS: Dr. C. WHISSELL
Fall 2006

Course Outline (This is a plan of action and may be modified if necessary)

W Sept 6	Intro to Course
M Sept 11	Design (IVs and DVs, Predictors and Criteria, Causality)
W Sept 13	Design (Construct and Operational Definitions, Qualitative Analysis)
M Sept 18	Design (Exp. Bias, Demand Characteristics, Blinds, Blocking)
W Sept 20	Design (Scales of Measurement, WS and BS designs)
M Sept 25	SPSS
W Sept 27	Descriptive Statistics (Central tendency, Variability, Distribution Shape)
M Oct 2	Descriptive Statistics (Correlation, Truncation, Transformation)
W Oct 4	FIRST TEST *followed by Thanksgiving*
W Oct 11	Inferential Statistics (Population, Sample, Inference, Hypotheses)
M Oct 16	Inferential Statistics (Type I and II Error, Power, Precision, df)
W Oct 18	Inferential Statistics (t-tests – BS and WS) *followed by Study Week*
M Oct 30	Inferential Statistics (Oneway ANOVA, theory of ANOVA)
W Nov 1	Inferential Statistics (Post-hoc tests, Selection)
M Nov 6	Inferential Statistics (Nonparametric Alternatives to t, oneway)
W Nov 8	Inferential Statistics (Relationship: r, rho, V)
M Nov 13	Inferential Statistics (Linear Regression)
W Nov 15	Inferential Statistics (Factorial ANOVA: nulls, trees)
M Nov 20	Inferential Statistics (Factorial ANOVA: examples)
W Nov 22	Inferential Statistics (Factorial ANOVA: interactions)
M Nov 27	SECOND TEST
W Nov 29	Inferential Statistics (Chi Squared Goodness of Fit)
M Dec 4	Inferential Statistics (Contingency Chi Squared)
W Dec 6	Catch-up and/or Review

You will have to sign up for a once-a-week lab session of one hour to go along with this course. There will be lab assignments that must be completed and handed in at the lab itself. They will not be accepted late or early. Attendance at lectures and at labs is obligatory. If you miss classes you will have a very hard time catching up with the course!!!!

Grading Scheme

Test 1	25%
Test 2	25%
Labs	25% (10 @ 2.5% each)
Final Exam	25%

To contact Dr. Whissell, look on the door of her office (A230) for listed office hours. You can also see her at the end of class or leave a note in her mailbox or a message on her voice mail (706-675-1151 ext 4251). DO NOT USE EMAIL. The teaching assistant will post office hours of his/her own.

LIST OF LAB EXERCISES

WEEK OF	*LAB*
Sept 18	0. Creating a data and saving and file in SPSS
Sept 25	1. Descriptive statistics – central tendency and distribution shape
Oct 2	2. Descriptive statistics – variability and transformation/truncation
Oct 16	3. t-test BS and WS
Oct 30	4. Oneway ANOVA with post hoc tests
Nov 6	5. Correlation and Scatterplots
Nov 13	6. Kruskal-Wallis and Sign test
Nov 20	7. ANOVA
Nov 27	8. ANOVA follow-up (post hocs and interactions)
Dec 4	9. Chi Squared

FORMAT OF A STANDARD REPORTING PARAGRAPH

1. ***Specification of the statistic***
2. ***Statement or implication of the null(s)***
3. ***Evaluation of assumptions***
4. ***Explicit mention of rejected and non-rejected null(s)***
5. ***Parenthetical statement(s) [these typically include a statistic name, df, a numerical value, a p value, and occasionally an effect size indicator]***
6. ***Either (a) details of values such as means, etc***
   and/or (b) details of post hoc tests
7. ***Verbal summary of meaningful conclusions***
8. ***Evaluation of OOMPH.***

For example:

(1) A oneway analysis of variance **(2)** was used to compare mean running times in the 100 m for athletes from five countries. **(3)** Data were normally distributed (skew ratio<3), and homogeneity of variance was satisfied (p>.05). **(4)** The null of equality for all means was rejected **(5)** (F(4,122)=37.55, p=.0003, omega squared=.27). **(6)** Student-Newman-Keuls post-hoc tests revealed significant differences among almost all pairs of countries, with the exception of countries A and C. The means were 12.23 (A), 10.77 (B), 12.17 (C), 10.03 (D), and 11.11 (E). **(7)** Runners from country D were the fastest, while those from countries A and C were the slowest, with athletes from B and E falling between the two extremes. **(8)** As indicated by the moderate effect size, differences among countries were significant, but not overwhelming.