HComm 308, Research Methods, Spring, 2012

MW 11:30am – 12:45pm, CP 19
Tu 4:00pm -6:45pm, CP 19

Instructor: Lysander Padilla
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Office Hours: Tuesday, 3:00pm – 4:00pm; Wednesday, 1:00pm – 2:00pm; or by appointment.

I. Course Objectives (Expected learning achievements):

At the end of the course, the student is expected to:

1. Understand (and using very small data sets) able to compute elementary descriptive statistics, such as the mean and standard deviation, phi coefficient, Pearson correlation coefficient and the simple regression coefficients (the alpha and beta in the regression equation).

2. Understand and perform elementary statistical inference: that is, using very small data sets, able to compute and interpret tests of difference, such as t-test for independent and paired two groups, one way and two-way Analysis of Variance (ANOVA). Understand and interpret the significance coefficient (Type 1 error).

3. Write a research objective and propose a statistical technique appropriate for it (i.e., translate a conceptual hypothesis into a statistical hypothesis). Critique a research report using learning objectives #1 and #2.

II. Required Text

Reinard, John C. (2006). Communication Research Statistics. Thousand Oaks: Sage. All references of chapters (signified by "Ch.") pertain to this textbook. Class discussions and the content of quizzes will refer to this book.

III. COURSE OUTLINE

WEEK	DATES	DESCRIPTION
1	1/23, 25	Class Rules, Grading System, Requirements, Syllabus
2	1/30, 2/1	Using Statistics to Conduct Quantitative Research, Ch 1; Collecting Data on Variables until Variables and Hypothesis, Ch 2.
3	2/6, 8	Continuation of Ch 2 until Sampling.
4	2/13, 15	Measures of Central tendency, Ch 3; practice computation
5	2/20, 22	President's Day; Looking at Variability and Dispersion, Ch 4 until p. 69
6	2/27, 29	Remaining Ch 4: Standard Normal Curve and z scores
7	3/5, 7	Practice Calculations; Extra Credit Work on the Normal Curve
8	3/12, 14	Hypothesis Testing and Statistical Significance, Ch 7
9	3/19, 21	MIDTERM EXAMINATIONS
10	3/26, 28	SPRING BREAK
11	4/2, 4	Correlations. The idea of a statistical causation: linear regression, Ch 5
12	4/9, 11	Non Parametric tests Ch 10 – 11
13	4/16, 18	ANOVA Ch 8 - 9
14	4/23, 25	Critique of a Finished Research
15	4/30, 5/2	Writing a Research Proposal
16	5/7, 9	Integration; Review

FINAL EXAMINATIONS WEEK

IV. Grading Criteria and course procedures

Weights	Items
25%	Test #1, the mid-term.
25%	Test #2, the final.
25%	Quizzes (Frequent: there will be a short quiz almost every week).
25%	Term Paper: the Research Proposal

A Prefinal Grade composed of the midterm examination grade (50%) and the available sum of quizzes (50%) may be computed before the final examination. The maximum points of the sum of quizzes will be set equal to 100% as also the major examinations. The Prefinal Grade can therefore be a basis for exemptions from the final examinations. Should the qualified student opt to be exempted, the Prefinal Grade will become his final grade. Only students rating A, and B in the prefinal grade will be given the choice to be exempted.

The translation of percentage points is as follows:

Letter Grade	Equivalent in Percent
A	91-100
B	81-90
C	71-80
D	61-70
F	60 and below

Per “Full plus-minus grading policy” (see link next section [**V. Required stuff**], a particular letter grade may or may not be acceptable for a specific course, level, major, or credit units (find out for your individual requirements, using the link). The detailed breakdown per letter grade is:

98 - 100	A+
94 - 97	A
91 - 93	A-
88 - 90	B+
84 - 87	B
81 - 83	B-
78 - 80	C+
74 - 77	C
71 - 73	C-
68 -70	D+
64 - 67	D
61 - 63	D-
60 & below	F

V. Required stuff

Campus emergency policies: http://www.fullerton.edu/emergencypreparedness/ep_students.html
Campus academic dishonesty policy: http://www.fullerton.edu/senate/PDF/300/UPS300-021.pdf
CSUF policy on disabled students: http://www.fullerton.edu/disabledservices/dss_student_Handbook.htm
Departmental policies apply to this course, including a minimum grade requirement for graduation.
Full plus-minus grading policy**:** http://www.fullerton.edu/admissions/CurrentStudent/gradingsystem.asp
Field trip policy and forms:
http://ehs.fullerton.edu/AcademicSafety/FacultyResponsibilitiesForStudentHealthAndSafety.aspx

VI. Course Philosophy

Research in Communication or in any other field requires knowledge (conceptual grasp) and working skills of elementary statistics, not as a branch of mathematics, but as an application (to research). In this class, applied statistics will be treated as a very important tool of (empirical) research.

Every student must know both the logic and procedure (how to do it manually; or to trace the flow of operations that is automatized by the software) of elementary descriptive and inferential statistics. For this course, the upper reach of elementary statistics stops at simple regression and correlation and multiway ANOVA (i.e., "advanced" statistics begins at multiple regression). Modeling communication research using advanced statistics such as path analysis should be understood conceptually, because advanced statistics may be readily computed by machines.

VII The Term Paper: Research Proposal

Term Paper Requirement:

Each student must submit a research proposal exhibiting knowledge of elementary descriptive and inferential statistics. The paper is composed of the following terms of reference, which should follow one after the other in logical sequence:

- Title Page (Title of the study, Name of student, Course and Section, Semester, Professor)
- Background and statement of the problem (this in the light of a literature review: at least 2 journal articles, not earlier than 2005)
- Research question/s or hypotheses, aim and objectives, variables (independent and dependent)
- Study design, indicating the rationale or conceptual reasoning behind each:

  a) Population and sampling (sample size)
  b) Data collection methods and instruments (a questionnaire to be attached as an appendix)
  c) Data analysis methods (descriptive statistics and the tests of inference appropriate to the hypotheses)

- Projected or Expected results (dummy tables, showing for example, a cross table of variables, or a reference to previous studies showing a range of coefficients)
- Ethical considerations
- References used (cite author, title, year, publisher). Make separate sections for books and for journal articles). For style, please choose either the APA or the Chicago
- Endnotes numbered consecutively are preferred to footnotes, but the student may choose either, as long as it is maintained consistently.

The length of the paper may vary around the mean of 10 pages (lines double spaced). The paper is due April 30, 2012.