Mass Communication Statistics | MMC 6936-07EH | 3 Credits

Statistics are no substitute for judgment. ~ Henry Clay

Fall 2014

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Office Hours Virtual. I reside in Georgia; therefore, please contact me via email at the account listed above. I will respond within 24 hours (excluding weekends).

Course Site: Located in Canvas via https://lss.at.ufl.edu/

Course Communications: For questions related to course concepts, assignments, policies, and procedures, please use the general discussion forum on the course site. For communications of a personal nature (e.g., course performance), please email me directly at the university account listed above.

Required Texts

Reinard, J. C. (2006). *Communication research statistics*. Thousand Oaks, CA: Sage. ISBN: 0761929878

Cunningham, J. B., & Aldrich, J. O. (2012). *Using SPSS: An interactive hands-on approach*. Los Angeles, CA: Sage. ISBN: 9781412995153

COURSE OVERVIEW

Course Description: This course introduces students to foundational statistical concepts and provides applied experience with conducting, interpreting, and reporting results obtained from the most commonly used tests in the field of communication.

Purpose of Course: This course helps students understand the role that statistical analysis plays in the quantitative research process.

Course Goals and/or Objectives: The course is organized around specific cumulative objectives. As a result of this class, students will be able to:

- Identify and apply key concepts involving measurement; descriptive and inferential statistics; populations, samples, and sampling techniques; the unit normal curve and standardized scores; reliability and validity; estimators; and confidence intervals.

- Identify and apply key concepts involving statistical inference; sampling distributions; and hypothesis testing, statistical significance, practical significance, effect size and decision errors.
- Identify and apply key concepts involved in making statistical inferences about means, proportions, correlations, and regression.

NOTE: Where appropriate, for each of the inferential procedures, students will:

a) Report the appropriate summary statistic(s); the research hypothesis and the null hypothesis,
b) Identify the appropriate test statistic(s), and the assumptions of the test statistic(s),
c) Report the criterion alpha,
d) Test (where possible) the assumptions of the test statistic(s),
e) Calculate and report the appropriate degrees of freedom (df),
f) Using the test statistic(s): compute and report the test coefficient(s),
g) Identify the corresponding critical coefficient(s) and p value(s),
h) Interpret and report in writing the final decision(s) concerning the null hypothesis, and
i) Calculate, interpret, and report in writing the effect size (where appropriate).

Instructional Methods: Students examine the conceptual background, formulas, distinguishing features, assumptions and typical applications of a variety of statistical procedures and tests. The class is organized as follows:

- Conceptual features are introduced.
- Formulas and applications are examined.
- Hand computations are initially performed on small data sets.
- SPSS computer applications are presented and analyses conducted on relatively large data sets.
- Graded and non-graded activities are completed.
- Cumulative exams assess progress in mastering the subject materials.

COURSE POLICIES

Attendance Policy: Because this is an online asynchronously delivered course, attendance in the form of calling roll will not occur; however, students are expected to sign onto the course site at least once each day, Monday – Friday, to check for course updates in the announcements and discussion sections of the site.

Exam Policy: Exams occur during a testing window that will be specified prior to their release. Students must complete the exams *independently* within the specified timeframe.

Quiz Policy: Most weeks require students to complete a comprehension quiz that helps you to gauge your understanding of the material. Quizzes are multiple choice and non-graded in the sense that your actual score is not factored into the course grade; rather, quizzes count toward the participation grade. Successful completion is based on 1) answering all quiz questions and 2) on-time submission. Make-ups for the quizzes are not permitted.

Assignment Policy: Periodically, you will be given a graded homework assignment or discussion post to complete by a specified deadline. The graded homework assignments provide you with hands-on experience with the material and are to be completed *independently*.

Make-up Policy: The ability to make up a missed assessment is at the sole discretion of the instructor and is not to be assumed by the student as automatically approved. The student is responsible for contacting the instructor via email within 24 hours of the missed deadline. In instances where an assessment is accepted late, a one-letter grade per day late penalty will be applied, including weekends. An assessment will not be accepted after the fifth day that it is late.

Course Technology: This course makes extensive use of SPSS, a statistical software program, which is available at apps.ufl.edu. Detailed instructions for accessing this software is located on the Course Materials page of the course site.

Course Performance: If at any time during the term you experience circumstances that adversely affect your performance, it is your responsibility to contact me immediately so that, if possible, reasonable accommodations can be made. A student who waits days, weeks or until the end of the term to claim a hardship will not be accommodated. Be proactive.

UF POLICIES

University Policy on Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive; therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php. In this course, exams, homework assignments, and quizzes are to be completed ***independently*** without any collaboration with others in the course or elsewhere.

Netiquette - Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages and threaded discussions; this includes but is not limited to: Using appropriate language and tone, providing descriptive subject lines, and addressing one another with respect. Failure to do so may result in having your communication options restricted or revoked.

GETTING HELP

For issues with technical difficulties for E-learning in Sakai, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

GRADING POLICIES

Mastery of the material will be measured via the following assessments:

Assignment	Percentage
Exam One	20%
Exam Two	25%
Final Exam	30%
Homework	15%
Quizzes & Discussions	10%

Exams: All exams are cumulative and require students to *independently* run, interpret, and report the results for a variety of research scenarios using hand and/or SPSS calculations.
Practice Activities: These voluntary, non-graded activities provide hands-on experience with the various concepts and analyses covered in the course. While not required, it is in

your best interest to complete these exercises because they will prepare for the graded homework assignments and exams.

Homework: These required, graded assignments provide you with hands-on experience with the various concepts and analyses covered in this course and help to prepare you for the exams.

Quizzes: These required, graded activities help you to assess how well you understand the materials presented in the course readings and lectures. While actual performance on the quizzes isn't factored into the course grade, students do receive participation credit for on-time completion. Quizzes, if missed, may not be made up.

Discussion: These required, graded activities provide you with the opportunity to explore course concepts and to share your course experiences with one another. As with the quizzes, discussion posts count toward participation credit and may not be made up if missed.

Grading Scale: The following scale applies to this course.

100 – 93%	A	86 – 83%	B	76 – 73%	C	66 – 63%	D
92 – 90%	A-	82 – 80%	B-	72 – 70%	C-	62 – 60%	D-
89 – 87%	B+	79 – 77%	C+	69 – 67%	D+	59% - below	F

COURSE SCHEDULE

Week	Date	Topic	Reading*	Assignment
1	8/25 - 30	Course introduction	R: Ch. 1 -2 (pp. 17 – 27) C&A: 2	Read syllabus Review site Post intro
2	8/30 – 9/6	Measurement & descriptive statistics	R: Ch. 3, 4 (pp. 61 –73), 5 C&A: Ch. 4, 11	Discussion Quiz Homework
3	9/7 - 13	Populations & samples	R: Ch. 2 (pp. 27 – 41) R: Ch. 4 (pp. 74 – 86)	Quiz Homework
4	9/14 - 20	Distributions, estimators, reliability & validity, confidence intervals	R: Ch. 6, 4 (pp. 68 – 69), 2 (pp. 35 – 37)	Quiz
5	9/21 - 27	**EXAM ONE**	Modules 1 – 2	**EXAM ONE**
6	9/28 – 10/4	Inference, hypothesis testing, effect size; t-Test for One sample mean	R. Ch. 7 (pp. 145 – 163) C&A: Ch. 12	Quiz (x 2) Homework
7	10/5 - 11	t-Test for Two independent/ dependent sample means	R. Ch. 7 (pp. 164 – 177) C&A: Ch. 13 – 14	Quiz Discussion
8	10/12 - 18	Analysis of Variance (ANOVA)	R: Ch. 8 C&A: Ch. 15	Quiz
9	10/19 - 25	ANOVA (cont.)		Homework
10	10/26 – 11/1	**EXAM TWO**	Modules 1 – 3	**EXAM TWO**
11	11/2 - 8	z Test for One Sample Proportion Chi-square Goodness of Fit	R: Ch. 10 (pp. 249-258) C&A: Ch. 22	Quiz

12	11/9 - 15	Chi-square Test of Association, 2x2 case	R: Ch. 10 (pp. 258-280) C&A: Ch. 23	Quiz
13	11/16 - 22	Chi-square Test of Association		Quiz Homework
14	11/23 - 29	Pearson Product Moment	C&A: Ch. 19	Quiz
15	11/30 – 12/6	Simple Linear Regression	C&A: Ch. 20	Quiz
16	12/7 - 13	SLR (cont.)		Discussion
17	12/14 - 19	**FINAL EXAM**	Modules 1 - 5	**FINAL EXAM**

*R = Reinard textbook; C&A = Cunningham & Aldrich textbook

Note: See **Due Dates** file in the Syllabus section of the course site for details regarding submission dates and times for graded assignments.

Disclaimer: This syllabus represents the current plans and objectives for this course. As we progress through the term, these plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

End of syllabus.