FCS 3210-1 (FCS Statistics), Fall 2016

*** **Please read the syllabus carefully. It is a contract of sorts,**   ***
*** **outlining your rights and responsibilities as a student in this**   ***
*** **course.**   ***

Official U of U description: How to present and analyze data relevant to Family and Consumer Studies. Topics include means, standard deviations, T-tests, chi-square, ANOVA, regression analysis, correlations, and computer assignments.

Overview: The goal of this class is to teach you some of the statistical techniques often used by professional researchers. You learn to employ basic statistical techniques in support of a substantive argument; you will also have a better understanding of published quantitative research.

What you'll learn: an introduction to quantitative data analysis.

What you'll get: four credits and fulfillment of a Department of Family and Consumer Studies requirement; the groundwork for a graduate-level introductory class in social statistics (e.g., FCS 5110/6110).

What's expected of you: scalar algebra (i.e., the kind you learned in high school) & reasonable familiarity with computers. Also, please buy a dumb calculator for the exams. Finally, a flash drive (small is fine) will make some of the computer work easier, but isn't required.

Instructor: Professor Nicholas H. Wolfinger (Nick to you)

Class times: Tuesday and Thursday, 4:35-6:35pm

Room: ST 104

Office hours: Tuesday 6:35-7:35, Thursday, 3:30-4:35, and by appointment

Office: 256 Alfred Emery Building

E-mail: Nick.Wolfinger@fcs.utah.edu; I check constantly. Please email me here, not on Canvas.

Phone: (801) 581-7491 (office). I will only be in my office during office hours, so email is better. If you phone my office and I'm not there, I'll receive an email notification. Accordingly, please speak slowly and clearly.

Mailbox: 228 Alfred Emery Building, the Department of Family and Consumer Studies office. If turning in an assignment make sure to sign the receipt verification log (ask at office).

Internet: Canvas, formerly Blackboard Vista, formerly WebCT. I will be posting homework and handouts here. Do not attempt to contact me here--please use my email instead.

Books, & reading for this course:

A book isn't required for this course, but it's helpful to have one or more introductory statistics texts on hand as a reference.

There is a high quality statistical textbook available as a free download. You should all do so: https://openstaxcollege.org/textbooks/introductory-statistics.

Another stats book I like is *Elementary Statistics in Social Research*, 12th edition. Jack Levin, James Alan Fox, and David R. Forde (Pearson Education Inc., 2013). ISBN-10: 0-205-84548-7. Older editions are just fine, by the way. If you do buy this book, I encourage you to buy it used on http://www.amazon.com or http://www.half.ebay.com/. If you want to obtain it locally, try KSL, http://www.ksl.com/?nid=13.

Here are some other stats books that I think well of. Any edition is fine, although other things being equal newer is generally better:

Applied Statistics for the Social and Health Sciences, by Rachel A. Gordon (ISBN-10: 0415875366)

Introduction to the Practice of Statistics, by David S. Moore and George McCabe (ISBN-10: 1464158932)

Introductory Statistics, by Thomas H. Wonnacott and Ronald J. Wonnacott (ISBN-10: 0471615188; older, but still good)

There is something to be said for having more than one stats book. Maybe one will offer just the right book at just the right time.

If you need more information about anything, there are many good resources on the Internet. Wikipedia has good entries on all statistical concepts. Stata commands can be investigated by googling "COMMAND NAME Stata."

I encourage you to read the first two chapters of the free download text. It will provide useful background. Thereafter, consult a text to firm up your understanding of difficult concepts.

Grades: Homework (50%), midterm (20%), presentation (5%), final (25%)

Grades will be curved—but only to your benefit—and based on the following

scale:

A	93%+	A-	90%-92%	B+	83%-86%
B	83%-86%	B-	80%-82%	C+	77%-79%
C	73%-76%	C-	70%-72%	D+	67%-69%
D	63%-66%	D-	60%-62%	E	<60%

<u>What are these things I have to do?</u>

Homework: Most weeks you will receive a homework assignment. Please check Canvas after every class to see if a new assignment has been added. Some will be completed online, while others need to be printed out. If so, complete the assignment and turn it in at the <u>beginning</u> of class on the designated day (or complete your Canvas assignment prior to class). Alternately, turn it in before class at 228 AEB. Late homework will not be accepted. Homework must be stapled or paper-clipped. I will not accept loose assignments. Your lowest homework grade will be discarded at the end of the semester (in other words, there is one assignment you need not complete).

Presentation: The presentations will begin on Tuesday, October 18, and run for the rest of the semester. Sign up on Doodle http://doodle.com/poll/bw68pcnityu4t7r3) for your three to five minute presentation. For your security, I encourage you to sign up for a Doodle account (it's free). You will be required to present the quantitative findings from an article in a newspaper or magazine, scholarly journal, or book. Tell the class what the article or book is about, present data, and offer your opinion as to whether you're convinced. Presentations are graded on a pass/fail basis; in other words, you need only do one to get all points.

COURSE SCHEDULE

Week 1   Introduction, central tendency

Week 2   Visualizing data

Week 3   More visualizing data, lowess

Weeks 4-5   Populations, samples, & the standard error

Weeks 6-7   t-tests

Weeks 8-9   Cross tabulation and chi-square tests

Week 10   Correlation

Weeks 11-14 Regression and extensions

Week 15   Test selection, summary, review

Important dates

Midterm: Tuesday, October 6, in class
Final: Tuesday, December 13, 6-8pm

Both exams will be given in the regular classroom.

Software

Most assignments will require the use of statistical software. The software of choice is STATA (www.stata.com). It is available in CSBS lab computers. I encourage you to use it there, as it's less complicated. You may also access it remotely, at https://apps.csbs.utah.edu/Citrix/XenApp/auth/login.aspx. Log in using your University of Utah ID and password. You will be required to download and install the Citrix app. Remote access requires some understanding of computers, so it will not be supported in class (in other words, you're on your own). Instead, contact CSBS Computing (https://support.csbs.utah.edu/tiki-index.php) for access questions; save the STATA questions for me. STATA will be easier to use if you save data files on your own flash drive. Finally, you are free to buy a copy of STATA. If you do so, don't get Small STATA. You are free to use any other statistical software, but it also will not be supported.

IMPORTANT NOTICES

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

In accordance with the University accommodations policy no accommodations for content will be given.

THE RIOT ACT

Academic honesty: All honesty and plagiarism policies established by the University of Utah will be upheld in this class. Academic misconduct includes, but

is not limited to, representing another's work as your own, collaborating on individual assignments, and submitting the same work for more than one course without the permission of both instructors. None of these actions will be tolerated.

If it is discovered that you have engaged in academic misconduct of any type in this course, the Family & Consumer Studies departmental policy states that you must be given a failing grade in the course and be reported to the Dean and the VP for Academic Affairs, who will keep your name on record. Should you be reported more than once, you may face expulsion from the University.

For further information about the University of Utah's policies regarding academic misconduct, please refer to the Student Handbook.

Scheduling accommodations: You should register only for those courses for which you have no scheduling conflicts that will interfere with your ability to complete course requirements. If you must be absent from a specific class to participate in officially sanctioned University activities (e.g. band, student government, intercollegiate athletics), religious holidays, or other obligations meeting with the instructor's approval, you will be permitted to make up or otherwise receive credit for missed assignments or exams.

Grade challenges: If you disagree with the way any test or assignment has been graded, you can make a challenge in writing. Challenges must be typed and submitted to the instructor no later than one week after exam/homework has been returned. Your challenge should explain why you disagree with the way the question was graded, and must include page numbers and/or specific references to lecture or text(s) justifying your disagreement.

Exams

1) You must speak with me before the scheduled date if you anticipate missing an exam. Retroactive (i.e., after the exam) notification is acceptable only if you or an immediate family member is in the hospital or in jail. Should either be the case please provide written documentation.

2) Space allowing, please sit every other seat during exams.

3) Do not wear headphones during exams.

4) No smart phones allowed during exams. However, you'll want a dumb calculator.

5) Please remove course materials (papers, books, etc.) from your desk during exams. Other stuff (tissues, food, etc.) is fine.

6) Make a copy of everything you turn in. Please retain all returned tests.

<u>General</u>

1) Unless otherwise notified there are no extra credit assignments. Please don't ask.

2) The schedule of readings, assignments, tests, and topics may change. I will announce any changes in class and via Canvas. You are responsible for being aware of them.

3) Unclaimed assignments and tests will be thrown away on December 31, 2016.

4) I reserve the right to give pop quizzes at any time.