SYA 3400 Introduction to Quantitative Social Research Methods
Spring 2017 (1/9-4/22, 2017)
Ziff Education Building 150
Tuesday 2:00 – 3:50pm

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Office Hours: Tuesday 10:00am -12:00pm
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Description:
In this course we will study the basic logics and skills of quantitative data analysis in social research. We will learn various statistical techniques, common public-use data sources, and the basics of survey research design. Lectures will take half of the class time, another half will be devoted to discussing practice problems and developing data analysis skills using Stata and Excel.

This course maintains a strong emphasis on the social background of data analysis. All class examples and assignments pertain to social, demographic, or economic issues. You will become familiar with the conventions of quantitative analysis in social research, as well as the common pitfalls. By the end of the course, you are expected to have sufficient background to critically evaluate the research claims made in academic work and mass media.

You do not need previous statistical computing experience to do well in this course, nor do you have to be a "math-oriented" person. Students who apply good study skills — consistently attending classes, reading assigned texts, and completing all assignments on time — can expect to do well in the course.

Textbook:
REVEL for *Elementary Statistics in Social Research*
Updated – Access Card, 12th Edition
Jack Levin, James Alan Fox, David Forde
2017 Pearson
ISBN-13: 9780134238784

Note that we are using the online version (i.e., REVEL) of the textbook, not the physical book. The physical book is more expensive and does not allow you to participate in the online evaluations. When you register for REVEL, make sure to register only one user account with your FIU email. If you do not use FIU email, your identity will not be officially verified. If you register for multiple user accounts, your REVEL grades will not be recorded properly.

Software:
This course uses Excel and Stata for data analysis. FIU students can access Stata 14 via https://elabs.fiu.edu/Citrix/eLabsWeb/ . For those who would like to use Stata offline, an inexpensive limited version ($38 for 6-month license) called "Small Stata" is available for college students. See http://www.stata.com/order/new/edu/gradplans/student-pricing/ for details. If you own a slightly older version (i.e., Stata10-13), it is not necessary to buy or upgrade to the current version.

Requirements:

1. Reading: Ideally, readings for each lecture should be completed in advance. Textbook chapters will be available on REVEL. Lecture notes will be available on Blackboard.

2. Attendance: Except for medical emergencies, religious holidays, or varsity athletics, attendance at lecture is mandatory. Proper documentations are required for excuses. If you cannot attend classes for personal reasons (i.e., other than the aforementioned), you need to get my consent via email in advance. Up to 3 absences can be excused for personal reasons. Once excused, there will be no penalty on your attendance grade. However, each unexcused absence leads to a 2% deduction in your final grade. Those who have 5 or more unexcused absences fail this course.

3. Assignments: There will be weekly REVEL assignments that, counted together, comprise 60% of the total grade for the course. The due dates and instructions can be seen once you log into your REVEL account. Late assignments will NOT be accepted.

4. Exam: There will be three exams. All exams will be deployed online during the usual class time. You do not need to be on campus to take the exams, but you must have a stable computer and internet. You are not allowed to discuss questions with other people during the exam. You may consult our course materials, but be mindful of the time restriction.

Grading:

Your grade will be determined by the exam scores, REVEL assignments, and class participation.

- Attendance 10%
- REVEL assignments 60%
- Exams 30%

Your course grade will be assessed as below:

A	95-100
A -	90-95
B+	85-90
B	80-85
B-	75-80
C+	70-75
C	65-70
D	60-65
F	< 60

If you feel that your assignment or exam has been graded unfairly, you have one week from the date when it is returned to contest the grade. To contest a grade, you must submit in writing the reasons why you feel your grade should be changed.

Each student in this course is expected to abide by FIU policies on academic integrity. Any work submitted by a student in this course for academic credit will be the student's own work completed independently.

Email:

Always use your FIU email address. Please include the course number in the subject line (e.g., SYA 3400-Question about Exam 1). If you do not get my response in 48 hours, email again. Do not use Blackboard Message.

(Tentative) Course Outline:

1/10 Introduction to basic concepts and ideas; Chp 1

1/17 Frequency distribution; Frequency table; Histogram; Chp 2

1/24 Measures of central tendency and variability; Chp 3, 4

1/31 Standardized distribution; Z-score; Normal distribution; Chp 5

2/7 Sampling distribution; Standard error; Chp 6

2/14 **Exam 1**

2/21 Hypothesis test; Z-test for one mean; Lecture notes

2/28 t-test for one mean; Lecture notes

3/7 t-test for two independent samples; t-test for two related samples; Chp 7

3/21 Confidence intervals; Chi-square test; Chp 9

3/28 **Exam 2**

4/4 Correlation; Simple regression I; Chp 10, 11

4/11 Simple regression II; Chp 11

4/18 Overall review

4/25 **Exam 3**