# Data Application PADP 7120

Fall 2017 Tuesday: 6:30-9:15 Classroom: Journalism 513 Instructor: Dr. Jae Young Lim Office: after class / 2-4 pm., Friday E-mail: jylim@uga.edu

### **Course Objectives**

The course aims to help you develop un understanding of key concepts in data application.

- Learning to describe data and assessing relationships.
- Learning how data helps us in making decisions.
- Learning to use basic math to describe and assess data

#### **Required Texts**

 Gravetter, Frederick J., Wallnau, Larry B. 2017. <u>Essentials of Statistics for the Behavioral</u> <u>Sciences</u> (9<sup>th</sup> ed). Cengage Learning. (<u>8<sup>th</sup> edition in 2013</u> is perfectly fine.).

#### Grading

- Attendance: 10%
- First Assessment: 30%
- Second Assessment: 30%
- Problem Sets: 30% (each problem set: 6%)
- Grade Range
  - A: 92.5 100; A-: 89.5 - 92.49; B+: 86.5 - 89.49; B: 83.5 - 86.49; B-: 79.5 - 83.49 C+: 76.5 - 79.49; C: 73.5 - 76.49; C-: 69.5 - 73.49; D: 64.5 - 69.49; F: below 64.5

#### **Class Expectations**

Late problem sets will not be accepted without a valid excuse. All problem sets must be turned in at the beginning of class on the day it is due. I will <u>not accept problem sets submitted</u> <u>electronically through my e-mail account</u>. If you turn in a problem set late, for the set I will deduct a full letter grade for each 24 hours beyond the deadline (for instance, A to B instead of A to A-).

Attendance at every class is expected. <u>You are responsible to be on time</u> as each class will begin promptly at 6:30 p.m. A class attendance sheet will be distributed at the beginning of each class and tardiness will be noted. You are permitted no-strings-attached one class absence this semester; after that, you will have to bring a valid excuse note in advance to me; a post-absence note is limited only to medical emergencies; I will not accept any absences without a note (sending me an e-mail, saying that you are sick, is not constituted as a valid note). Each absence without a note will lower your grade by 2% of your total grade.

You may use a laptop for note taking only. Surfing the Internet, checking emails, instant messaging with your friends, and so on are not permitted; any inappropriate use of your laptop

will result in your laptop privileges revoked during the rest of the semester. Please put your phone on vibrate at least as well. For e-mail communications, please keep your netiquette (http://web.wellesley.edu/SocialComputing/Netiquette/netiquetteprofessor.html).

For all problem sets, *it is imperative that you avoid plagiarism*. You are welcome to work with your colleagues for a given problem set, but you must turn in your own work. The University of Geogia requires all members of the university community to be responsible for knowing and understanding the policy on academic honesty. In addition, *no "extra credit" will be assigned* in this course under any circumstances. *Bring your own (cheap) calculator to each class*.

Problem Sets

- You will complete 5 problem sets during the term; it is due in a week.
- The sets are due at the beginning of class; late problem sets are accepted only by prior arrangement.
- You are encouraged to work together on problem sets, but must turn in your own work.
- The sets will be graded on correct answers and methods, so hand in all your work with each set, including your calculations and explanations of your reasoning to ensure you get as much credit as possible. (This applies to your exams as well).
- Work out problems on a clean sheet of paper in pencil; electronic copy is not acceptable.
- Problem sets will be available electronically via eLC.

## **Class Format**

For each class, there will be a 1-2 hour lecture followed by a break, solving several problems on the board by me, and individual exercises on your own; occasionally, I will demonstrate how to assess data using *Stata*, a statistical software, but you are not required to know *Stata* for the exams. BDAC, a computer room in Baldwin Hall, is where you can exercise *Stata*. There are many freely available materials on how to operate *Stata*. For those preferring a book, *A Gentle Introduction to Stata* by Alan C. Acock (Stata Press, 2016) is a good one; again, you are not required to purchase it.

## **Deviation from Syllabus**

Deviation from this syllabus may become necessary. You will be advised in advance of any deviation in a timely manner.

Weekly Schedule			
Week	Topics and Readings	Problem Sets Due	
<b>TX</b> 71	Introduction to Statistics		
(8/15)	- Readings:		
	• Ch.1		
W2 (8/22)	Frequency Distribution		
	- Readings:		
	• Ch.2		
W3 (8/29)	Central Tendency		
	- Readings:		
	• Ch.3		
W4 (9/5)	Variability		
	- Readings:		
	• Ch.4		
W5 (9/12)	z-Scores	Problem Set #1 due	
	- Readings:		
	• Ch.5		
W/6	Probability		
W6	- Readings:		
(9/19)	• Ch.6		
<b>W</b> 77	Probability and Samples		
(9/26)	- Readings:		
(9720)	• Ch.7		
W8	Introduction to Hypothesis Testing	Problem Set #2 due	
	- Readings:		
(10/3)	• Ch.8		
<b>W</b> /9	Introduction to the t Statistic		
(10/10)	- Readings:		
	• Ch.9		
W10 (10/17)	First Assessment	Problem Set #3 due	
	- Open books and notes (Ch 1-9)		
	- Bring a calculator; no computers		
	- Bring multiple sheets of paper		
W11	The t Tests for Two Independent Samples		
(10/24)	- Readings:		
	• Ch.10 (ANOMA)		
W12 (10/31)	Introduction of Analysis of Variance (AINOVA)		
	- Readings:		
	• Cn.12	Drahlana Sat #4 data	
W13	D and in and Regression	Problem Set #4 due	
(11/7)	- Keadings:		
	• Un.14 Correlation and Decreasion		
W14 (11/14)	R eadings		
	- IClaunings.		
	• Un.14		
W15	Thanksoiving Week		
(11/21)	i nanksgiving week:		

	Second Assessment	Problem Set #5 due
	- Covers materials since the First Assessment	
W16	(Ch 10, 12, and 14)	
(11/28)	- Open books and notes	
	- Bring a calculator; no computers	
	- Bring multiple sheets of paper	