SYLLABUS FOR STATISTICS 13 - LECTURE 2 INTRODUCTION TO STATISTICAL METHODS FOR THE LIFE AND HEALTH SCIENCES WINTER QUARTER 2016

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Lecture	Day	Class Time	Location
Lecture 1	TR	11:00 - 12:15	MS 4000A

Section	Day	Discussion	Location
1A	Monday	08:00 - 08:50	MS 5128
1B	Monday	09:00 - 09:50	MS 5128
1C	Monday	10:00 - 10:50	MS 5128
1D	Monday	11:00 - 11:50	MS 5128

Section	Day	Lab	Location
1A	Wednesday	08:00 - 08:50	BOELTER 9413
1B	Wednesday	09:00 - 09:50	BOELTER 9413
1C	Wednesday	10:00 - 10:50	BOELTER 9413
1D	Wednesday	11:00 - 11:50	BOELTER 9413

COURSE RESOURCES:

Textbook (optional): Tintle, Chance, Cobb, Rossman, Roy, Swanson, Vanderstoep, *Statistical Investigations*, Preliminary Edition, Wiley, 2015.

Probability and Statistics EBook (freely available at):

http://wiki.stat.ucla.edu/socr/index.php/EBook.

Software:

R, RStudio (can be downloaded freely from http://cran.stat.ucla.edu and https://www.rstudio.com). Statistics Online Computational Resource (SOCR), freely available at: http://www.socr.ucla.edu.

COURSE TOPICS

- 1. Data analysis.
- 2. Probability
- 3. Random variables.
- 4. Discrete probability distributions.
- 5. Continuous probability distributions.
- 6. Sampling distributions.
- 7. Estimation Confidence intervals.
- 8. Hypothesis testing.
- 9. Simple linear regression and correlation.
- 10. Analysis of variance.

COURSE POLICIES:

Please remember to turn off your cell phones. The use of laptop computers and other electronic devices will not be permitted in class. You are expected to adhere to the honor code and code of conduct. If you have a disability that will require academic accommodation, please contact the UCLA Office for Students with Disabilities (OSD).

ACADEMIC INTEGRITY:

As a student and member of the University community, you are here to get an education and are, therefore, expected to demonstrate integrity in your academic endeavors. All students must uphold University of California Standards of Student Conduct as administered by the Office of the Dean of Students. Students are subject to disciplinary action for several types of misconduct, including but not limited to: cheating, multiple submissions, plagiarism, prohibited collaboration, facilitating academic dishonesty, or knowingly furnishing false information. You may have assignments or projects in which you work with a partner or with a group. For example, you are welcome, and even encouraged, to work with others to solve homework problems. Even though you are working together, the assignment you submit for a grade must be in your own words, unless you receive specific instructions to the contrary. For more information about academic integrity, please go to http://www.deanofstudents.ucla.edu/.

COURSE GRADES:

There will be two midterm exams, a final exam, two lab quizzes, and homework or labs that will be assigned every week. Please staple your homework or labs and write your name and the discussion section on them. Late homework or labs will not be accepted and make-up exams will not be given. Students must attend all three exams and must complete all homework and labs. Being in class on time and fully participating is important for your understanding of the material and therefore for your success in the course. The dates/times for the exams are shown below.

The course grade will be based on the calculation $Final\ score = 0.10 \times Homework/Labs + 0.10 \times Quizzes + 0.20 \times Midterm1 + 0.25 \times Midterm2 + 0.35 \times Final$

COMMUNICATION:

In-class handouts can be accessed at http://www.stat.ucla.edu/~nchristo/statistics13. Please keep a current e-mail address with my.UCLA.edu in order to receive class announcements and reminders.

IMPORTANT DATES: First lecture: 05 January. Last lecture: 10 March. Holidays: 18 January (Martin Luther King, Jr.), 15 February (Presidents' Day).

EXAMS: Midterm 1: Monday, 25 January, 17:00 - 18:50. Midterm 2: Friday, 19 February, 17:00 - 18:50. Final exam: Monday, 14 March, 15:00 - 18:00.

Good Luck !!!