Statistics 213: Introduction to Applied Statistics

Sections 7, Fall 2019**,** MW 5:35-6:50p**,** 415 HW

Instructor: Ardalan Jalayer **Email:** aj145@hunter.cuny.edu
Office hours: Mondays 4:30-5:30p *(by appointment) HE924*

Learning Outcomes.
This course emphasizes statistical literacy and develops statistical thinking. Statistical literacy is promoted throughout the text in the many examples and exercises, drawn from published research findings and the popular press. Many of the examples and exercises discussed will highlight the central role of probability and statistics in 21st century science. Students should understand how to adequately interpret and communicate statistical results. Understanding the nature and role of variability is key to developing sound skills in statistical thinking.

Textbook: Introduction to Statistics and Data Analysis, Enhanced Review Edition (5th Edition) by Roxy Peck, Chris Olsen, Jay L. Devore. Duxbury Press; **WebAssign is mandatory!**

Class key for WebAssign (self-enrollment): **hunter 5497 0165**

Grading Policy
There are two in-class non-cumulative tests, online homework assignments (worth 20% of the grade), and a final exam. The tests and final are closed book exams. Calculators and formula sheets are allowed. The final is comprehensive. **There will be no remake for the tests and final!** The final counts twice as much as the tests. Lowest score will be dropped (if lowest score is at the final exam, that score will be counted only once).

Incomplete and Credit/Non-Credit
Students wishing to request an INC grade must do so in writing explaining the reasons, AND have AT LEAST a C average. Students wishing to request a CR/NC grade must do so prior to taking the final exam and must take all the exams, including the final exam, and have at least a 40% average.

Policy on Cheating
Cheating is an extremely serious offense. A student caught copying someone else's work and claiming it as his/her own will receive an F for this class, and could face disciplinary action, including suspension from Hunter College and loss of academic benefits. Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offense against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

Dolciani Mathematics Learning Center Resources
The Dolciani Center is located in the Library, 7th Floor, East Building. The lab provides multimedia materials (videotape & CDs), as well as tutoring. More information to be distributed shortly by the Center ambassadors.

Tentative Course Schedule:

Date		Topics	Text Sections
Wed	8/28	Introduction	1.1-1.4
Wed	9/4	Graphical summaries of data	3.1-3.3
Thurs	9/5	Numerical summaries of data	4.1-4.4
Mon	9/9	Probability	6.1-6.3
Wed	9/11	Random variables	7.1-7.4
Mon	9/16	The binomial distributions	7.5
Wed	9/18	The normal distributions	7.6
Mon	9/23	Review	
Wed	9/25	**First midterm exam**	
Wed	10/2	The sampling distribution of the sample mean	8.1-8.2
Mon	10/7	Confidence intervals for proportions	8.3, 9.1-9.2
Wed	10/16	Confidence intervals for means	9.3
Mon	10/21	Hypothesis testing	10.1-10.2
Wed	10/23	Hypothesis tests for proportions	10.3
Mon	10/28	Hypothesis tests for means	10.4
Wed	10/30	Comparing two means	11.1
Mon	11/4	Review	
Wed	11/6	**Second midterm exam**	
Mon	11/11	Paired data	11.2
Wed	11/13	Comparing two proportions	11.3
Mon	11/18	Conditional probability and independence	6.4-6.5
Wed	11/20	Bayes' rule	6.6
Mon	11/25	Inference in two-way tables	3.1, 12.2
Wed	11/27	Bivariate data: scatterplots and correlation	3.4, 5.1
Mon	12/2	Least squares regression	5.2-5.3
Wed	12/4	The simple linear regression model	13.1-13.2
Mon	12/9	One Factor ANOVA	15.1
Wed	12/11	Review (last class meeting)	
Wed	12/18	5:20-7:20p **Final Exam**	