Open Educational Resources   City College of New York

2020

Applied Statistics

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CUNY City College

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The City College of New York (CUNY)
Department of Psychology
Applied Statistics (4.0 credits)
Psychology 21500 Section 6X (28952) via ZOOM
Instructor: Alina Shevorykin

Email:	My contact info is posted on Blackboard
Class Meetings:	Hybrid, Saturdays 9:30am-1:40pm via ZOOM
Office:	Via ZOOM
Office Hours:	By appointment on Saturdays at 8:30am or after the class

Course Description: In this course you will learn about the mathematical techniques that are used by researchers to organize, summarize, and interpret results from their research studies as well as the studies of others. Collectively, these techniques are called statistics. During the semester you will be required to learn how to differentiate between each of the individual statistical procedures, and you will be expected to demonstrate your knowledge in class, through homework assignments, computer exercises, exams and participation in class discussions.

Course Objectives: After taking PSY 215, students should be better able to:
1. Acquire and apply an ability to evaluate fact-based evidence in the social sciences, and to critically evaluate practical problems encountered in a variety of contexts.
2. Evaluate hypotheses, research designs, research findings, and theories.
3. Formulate research questions and hypotheses.
4. Develop competence in quantitative reasoning and the conceptual basis for the application of statistical procedures.
5. Use statistical software packages.
6. Develop effective communication skills incorporating numerical formats.

Textbook Material:
This class will be using **zero-cost textbook**.
I will be posting required readings and assignments on Blackboard.

Calculator:
You would need at least a **Basic Scientific Calculator**

Attendance and Lateness Policy (as described in the Current CCNY Undergraduate Bulletin):
"Students are expected to attend every class session of each course in which they are enrolled and to be on time" (pg. 290). Students will be summarily dropped from the course for excessive absence, which is defined in the Bulletin as missing "twice the number of contact hours the course meets per week" (pg. 290), or 1 class session of PSY 21500. No distinction is made between excused and unexcused absences where this policy is concerned. As the course is cumulative, only 1 absence will be permitted. Beyond that, each unexcused absence will yield a decrease in final grade by one letter grade (e.g., B becomes C, etc.).

Assessment: The breakdown of your grade will be as follows. Description of all assignments is available on Blackboard.

4 Tests	30%
Final Exam	20%
Homework assignments	25%
Quizzes	5%
Class participation and attendance	15%
SPSS labs	5%

Grading: Decimal values are rounded to the nearest integer. All grades will be available on Blackboard in a timely manner. Each individual student is responsible for keeping track of his or her grades throughout the semester, and any grading problems should be brought to the instructor's attention immediately.

The CCNY College Grading System

97-100% = A+	87-89% = B+	77-79% = C+	65-69% = D
94-96% = A	84-86% = B	74-76% = C	<65% = F
90-93% = A-	80-83% = B-	70-73% = C-	

Make-up Policy: Students will need appropriate documentation to make-up an exam (e.g., a doctor's note). If such documentation is provided, the given exam will be taken **SEPARATELY from the REGULAR CLASS MEETING.** Make-up examinations are based on the instructor's prior approval and constitute a notable exception to regular policy, if permitted.

General Info: Students are required to complete all readings **BEFORE** the assigned class date (any changes to this syllabus **will be announced in class**). All the dates for each homework assignment are specified in the syllabus. **In the event of absence, it is up to the absent student to obtain all information about homework assignments and changes to the syllabus announced by the instructor during class by contacting other students.** Students are advised to exchange contact information with several classmates.

Academic Dishonesty: Academic integrity is important to the City College community, and all allegations of academic dishonesty will be dealt with according to the College policy on academic integrity. Students are responsible for knowing the policy, which can be found at: http://policy.cuny.edu/text/index/mgp/i/1-60/Integrity/1.3

The Office of Student Disability Services: The Office of Student Disability Services (SDS) is dedicated to providing equal access to the college curriculum and supports the success of City College students with disabilities. SDS is located in the NAC in room 1/218.

Sexual Harassment: City College is committed to the City University of New York (CUNY) Policy Against Sexual Harassment. Our shared goal is to maintain a community environment-academic and employment-that is free from all forms of intimidation, intolerance, exploitation and harassment. For further information about the College policy on Sexual Harassment, navigate to the following URL:
http://www1.ccny.cuny.edu/facultystaff/aao/sexual-harassment-policy.cfm

Extra-Credit: There will be some extra credit opportunities offered during classes. NO make-ups allowed for any reasons.

BY signing up for this class, you are agreeing to use professional language with your classmates and instructor(s) in all means of communications. Inappropriate language will NOT be tolerated under any circumstances.
CUNY and all of its employees and students do not tolerate any discrimination. For further information, follow the link: http://www.csi.cuny.edu/diversity_and_compliance/pdf/nondiscrimpolicy.pdf

Course Readings: All readings in the course textbook are broken down by chapter. Students are expected to read each assigned chapter prior to the class meeting during which its content will be introduced.

Week	Date	Lecture Topics & Readings Due	Assignments Due
1	August 29	Review of Syllabus Research Methods and Design	
2	September 5	Intro to Statistics Frequency Distributions	HW: Intro to Statistics
3	September 12	Frequency Distributions Central Tendency	HW: Frequency Distribution HW: Central Tendency
4	September 19	No classes scheduled	
5	September 26	Variability	HW: Variability
6	October 3	**Test 1** **SPSS lab on Descriptive Statistics**	
7	October 10	Z-scores Probability	HW: Z-scores HW: Probability
8	October 17	Probability and Samples Intro to Hypothesis Testing	HW: Probability and Samples HW: Intro to Hypothesis Testing
9	October 24	**Test 2** **SPSS lab on Z-scores**	
10	October 31	Intro to t Statistic The t Test for Two Independent Samples	HW: Intro to t Statistic HW: The t Test for Two Independent Samples
11	November 7	The t Test for Two Related Samples Chapter 14: Correlation (**Pearson ONLY**)	HW: The t Test for Two Related Samples HW: Correlation
12	November 14	**Test 3** **SPSS lab on t-tests and Correlation**	
13	November 21	Intro to Analysis of Variance	HW: Intro to ANOVA
14	November 28	College Closed	
15	December 5	Two-factor Analysis of Variance **ONLY**	HW: Two-factor ANOVA
16	December 12	**Short Test 4** **Review for the Final**	
17	December 19	**FINAL EXAM DEPARTAMENTAL (CUMILATIVE)**	