

INTRODUCTORY STATISTICS

PSYC 200-01 (3 Credit Hours)

Spring 2018

Tuesdays & Thursdays, 2:00 – 3:15 p.m.

Location: WB 911



Instructor: [Elijah Ricks, Ph.D.](#)

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Office Hours: (CHI) Tuesdays and Thursdays, 3:15 – 4 p.m. (and by appointment)

(SCH) Wednesdays, 1:00-2:30 p.m. (and by appointment)

To do a video chat with me using Zoom, go to <https://roosevelt.zoom.us/j/3537279615>

Text: Coolidge, F. L. (2013). *Statistics: A gentle introduction* (3rd ed.). Los Angeles, CA: Sage. ISBN: 978-1-4129-9171-1. Purchase as an e-book [here](#). The companion website for the book is [here](#).

Roosevelt University's Learning Goals: (a) Effective communication, (b) knowledge of discipline-focused content, and (c) awareness of social justice and engagement in civic life.

Course Objectives: This course will introduce you to basic statistical methods that describe a set of data and infer relationships between two or more variables in terms of probabilities. Although not the focus of the course, you will also gain some understanding of basic research methods. Upon completion of this course, you should (a) be able to identify appropriate methods of analyzing different types of data, (b) understand and be able to compute several basic statistical analyses, (c) appropriately interpret the results of such analyses, and (d) offer constructive criticisms of the methods used to gather or analyze data.

Prerequisites: This course involves heavy use of basic algebra. If you are uncomfortable with basic algebra, consider taking this course at another time. At a minimum, review and practice with online tutorials ([example](#)). You will also need a scientific calculator (no need for graphing capabilities).

Homework Assignments (20 points each): The homework assignments are designed to offer structured guidance to complete analyses. The exams will have less guidance. Ergo, doing well on the homework will help you prepare for the subsequent exam. Homework assignments are available on Blackboard as soon as we begin covering its corresponding topic, and will also be handed out in class. Do as much of the assignment as you can as we cover the relevant material. Because we will review the assignments on the dates they are due (specified below), under no circumstances may homework assignments be handed in late. If I do not have your homework in my hand by 2:01 p.m. on its due date, you will receive no credit for it. I recommend scanning your homework so that you can review it while preparing for the corresponding exam.

Exams (40 points each): Exams will be completed outside of the classroom. You may consult any resources you wish, excepting other people or the internet, unless that is how you access the textbook. Exams will be handed out during class. If you are absent, arrange for a friend to pick up a copy, or you may download it from Blackboard. We review the exams on the day they are due, so if you do not turn in your exam before or at the beginning of class on the day it is due, you will receive no credit for that exam.

Studying: Although some students struggle with the math involved in statistics, this material never goes beyond basic algebra. The real challenge of statistics is the interpretation of what you have calculated. This is a skill that takes practice, so spend time on it. Do not seek only to understand *what* a statistical test is for, but also seek to understand *how* it works, and *why* it leads you to a conclusion. Be prepared to identify the appropriate statistical analysis given a set of data and a research question, complete calculations, make conclusions, and offer interpretation and critique. To accomplish these ends, attend each class from start to finish, and take thorough notes from both lecture and the textbook. After class, consolidate notes from text readings and lectures. If you do not understand any part of the material, ask questions in class, ask classmates, attend office hours, hold study groups, work with a friend, find trustworthy sources on the internet, or read additional books. Practice by applying your notes to the homework assignments, using

online examples, practice assignments posted to Blackboard, or making up your own data. Do not expect to spontaneously understand material the day before the exam is due!

Grades: Your course grade will be computed by dividing the points you earn by the points that are possible. Points are not weighted differently; 1 homework point = 1 exam point = 1 extra credit point. Your final grade will be based on the following scale:

89.1% to 100% = A 69.1% to 79.0% = C 0% to 59.0% = F
79.1% to 89.0% = B 59.1% to 69.0% = D

Your grades will be available for review through the Blackboard system. You are responsible for checking your grades. If you see a discrepancy or have a concern please contact me as early as possible to get it resolved.

Classroom Behavior: Students are expected to conduct themselves in a manner compatible with the University's function as an educational institution (more [here](#)). Refrain from side conversations or other distractions to ensure everyone gets the best classroom experience. Punctuality is highly valued in the professional world, and is a sign of respect; Make it a habit now!

Course Schedule (Dates and topics are subject to change, with notice):

Date	Topic	Reading	Assignment
1/16	Introduction to Course and Statistical Methods	Chapter 1	HW #1 (Due 1/25)
1/18	Data, Samples, and Distributions	Chapter 2	
1/30	Exam #1 Due		Exam #1 Due
2/1	Central Tendency	Chapter 3	HW #2 (Due 2/8)
2/6	Standard Deviation, Variance		
2/13	Exam #2 Due		Exam #2 Due
2/15	Z-scores	Chapter 4	HW #3 (Due 2/27)
	Correlation and Regression	Chapter 6	
3/1	Exam #3 Due		Exam #3 Due
3/6-8	Spring Break – No Class		
3/13	Hypothesis Testing, the <i>t</i> test	Chapters 5,7	HW #4 (Due 3/27)
3/20	Effect Size, Confidence Intervals, Power	Chapter 8	
3/29	Exam #4 Due		Exam #4 Due
4/3	Analysis of Variance – One-Way	Chapter 9	HW #5 (Due 4/12)
4/5	Post hoc comparisons	Chapter 10	
4/17	Exam #5 Due		Exam #5 Due
4/19	Chi Square Test	Chapter 15	HW #6 (Due 4/26)
4/26	Last day of class		
5/1	Final Exam, 2:00 – 4:30 p.m.		Final Exam Due

Extra Credit: You may earn up to 16 points of extra credit through two optional assignments (each worth up to 8 points). You may turn in either one at any time, through Blackboard, up until the last day of class (4/26, at the end of the day). Each must be at least 3 pages, double spaced, to receive full credit. Quality will also have a major impact on grade. See Blackboard for more details.

EC 1: Search through history or current events to find one or more incidents where someone committed either the Type I or Type II error. Describe (a) how the error was made, (b) what problems the error created, and (c) what steps we can take to keep from making the same error.

EC 2: Find a misuse of statistics online, on television, in a movie, in politics, or anything else. Cite it so that I can find it (you may also attach it to the paper). Explain why it is a misuse of statistics, what problems may arise from it, and what the source should have done to appropriately use statistics.

Students With Disabilities: Roosevelt University complies fully with the Americans With Disabilities Act. Details are found [here](#). If you have or believe you have a disability that affects you academically, please contact the Academic Success Center at (312)341-3818, or Danielle Smith at dsmith51@roosevelt.edu, in AUD 1050, to arrange for any accommodations. Please tell me as soon as possible also, so that we can ensure your accommodations are met in a timely manner.

Academic Integrity: In the best interest of your education and intellectual growth, cheating, plagiarism, and lying will not be tolerated. See details in the [Student Handbook](#) (also see [here](#)). Ignorance of standards will not be accepted as an excuse. I have zero tolerance for copying another student's work. I have zero tolerance for allowing another student to copy your work. You may concert your efforts on homework assignments, but not exams. Students found guilty of academic dishonesty will fail the corresponding assignment, and their names will be forwarded to the Office of Enrollment and Student Services. Failing the assignment does not preclude imposition of other penalties by the University, including dismissal. When in doubt, ask me if something could be considered academic dishonesty. It is not worth risking your future!

“Rather fail with honor than succeed by fraud.” – Sophocles

Withdrawals: The last day to withdraw and receive a ‘W’ grade for this course is 3/23/18. Prior to and including the first week of the fall or spring semester sessions, students may drop one or more courses with no record of the class appearing on the transcript. In weeks 2 through 10 of the fall or spring semester, students may complete a Change in Registration form in person or by fax, found at [this link](#). After week 10 of the fall or spring semester students may not withdraw from courses without completing a Petition for Late Withdrawal form found [here](#). The petition form requires the student's signature and the approval of the instructor, department chair, dean or dean's designee. It also requires a statement of the non-academic reason for your late withdrawal, including the reason the student was unable to withdraw by the deadline, and documentation.

Withdrawing from courses may have serious consequences for academic progress towards the degree, for financial aid eligibility, for repayment of refunds, visa requirements (for international students), and eligibility for competition (for student athletes). Students should consult carefully with their instructors and academic advisors and must meet with a financial aid advisor before withdrawing from classes after the semester has begun. Tuition Refund Schedule and Withdrawal deadlines are published for each semester and for the summer session on the Important Dates page of the website, found [here](#).

Incomplete Grades: I follow the Registrar's policy for assigning Incompletes for this course. A grade of ‘I’ will be assigned only when a small portion of the total semester's work has to be completed and the student has a documented reason why the work cannot be completed within the regular timeframe.

Title IX: Federal law, specifically Title IX, and the University Sexual Misconduct Policy require that all employees are mandated reporters of incidents involving sexual or gender-based violence or harassment. Disclosures made to faculty or teaching assistants (TAs) about sexual or gender-based harassment, sexual assault, dating violence, domestic violence, and/or stalking on or off campus must be forwarded to the Title IX Coordinator. These staff are Responsible Employees and therefore are mandated to report. The Title IX office will contact any student who discloses an incident regarding student rights, including the option to request an investigation, interim safety measures, and/or academic accommodations. In certain circumstances, the Title IX Coordinator may need to proceed with an investigation, even if none is requested, if there are safety risks to the student or campus community. Participation in the process is voluntary.

If you want a confidential place to disclose sexual assault, sexual harassment or intimate partner violence, there are two confidential advisors on campus who are not mandated reporters. They

are: Audrey Guy, (312)244-0577; and LaDonna Long, (312)244-0426. Both are available via phone all hours. The Counseling Center (430 S. Michigan Avenue Room 470 Phone: 312-341-3548) staff are also NOT mandatory reporters and therefore NOT required to report a disclosure to the Title IX Office.

Roosevelt's Scholastic Policies: It is your responsibility to be familiar with and follow all of the University's policies. These are available [here](#).

Religious Holidays: Roosevelt University respects the rights of students to observe major religious holidays and will make accommodations, upon request, for such observances. See details [here](#). Students who wish to observe religious holidays must inform their instructors in writing within the first two weeks of each semester of their intent to observe the holiday so that alternative arrangements convenient to both students and faculty can be made at the earliest opportunity. Students who make such arrangements by the deadline will not be required to attend classes or take examinations on the designated days, and faculty must provide reasonable opportunities for such students to make up missed work and examinations. However, all work missed for such absences, including papers and examinations, must be made up. Students who do not arrange for excused absences by the deadline are not entitled to such accommodations.