COURSE SYLLABUS

Rutgers University, School of Management and Labor Relations
HR Data Based Decision Making
Rutgers University – Fall 2021
38:533:542:01
Monday, 7:20-10:00pm (JLB-103)

Professor: Lawrence Houston III	**Email:** lawrence.houston@rutgers.edu
Office: 94 Rockafeller Road, Room 212	**Course Learning Management System:** Canvas
Office Hours: By appointment	**Phone:** (848) 445-1051

TEXT: Salkind, N. J. (2021). *Statistics for People Who (Think They) Hate Statistics: Using Microsoft Excel* (5th ed.). Thousand Oaks, CA: Sage. ISBN-13: 978-1071803882

A free and open companion website for this textbook is available to help you study. This site, at **https://study.sagepub.com/salkind5e**, includes the data sets for the exercises in the book, as well as practice quizzes, flashcards, videos, and journal articles.

COURSE DESCRIPTION: This course is designed to introduce statistical concepts and analyses that are critical to Human Resource Managers. Emphasis will be placed on the basic concepts of quantitative analysis including models used to explore causality, an introduction to multivariate analysis, and the use of Microsoft Excel, a computer program used for statistics. Importantly, the course will focus on understanding, applying, and interpreting statistical techniques, rather on the derivations of methods or performance of calculations. Students are expected to take the material/concepts presented in class and apply them through a series of in-class activities, homework assignments, and quizzes. The overall goal of the course is not only to help students understand the mathematical/statistical concepts presented but also to assist in the application of these procedures.

COURSE OBJECTIVES: The major objectives of this course are:

1. To develop an understanding of the role played by statistics in the overall process of organizational research;
2. To learn an array of descriptive procedures for displaying statistical information in graphic and narrative form;
3. To learn a variety of tests and procedures that can be useful in data analysis, subsequent hypothesis testing and decision-making activities;
4. To demonstrate a critical understanding of how these tests can be used, their major weaknesses and strengths, and the critical assumptions underlying their legitimate application;
5. To provide a foundation of statistical knowledge for pursuing more advanced statistical methods in future courses; and
6. To learn to apply statistical concepts, scientific reasoning, and logic to organizational problems.

OVERVIEW OF COURSE FORMAT: Our course will be conducted during our scheduled class time on Mondays from 7:20-10:00pm EST in the Janice Levin Building, Room 103.

The classes will be a mix of lecture, class discussion, and in-class activities. We will start by discussing any questions you have about the reading, practice problems, or quiz. Then, I will provide a ***brief*** review of the day's topic. Please note that I assume that you have completed the readings and quiz prior to class. We will often use class time to work with actual datasets in Microsoft Excel. As this time goes fast - it is imperative that you read the assigned materials before class. Please also note that class will start and end promptly, be sure to show up to JLB-103 a few minutes early.

COURSE PORTAL: The Canvas learning management system will be the primary home for this course (https://rutgers.instructure.com/courses/121832), so you must be familiar with this mode of interaction as it will house the syllabus, PowerPoint slides for the lecture notes, assignments, and contact information. To access Canvas, you must use your net ID and password. All course announcements are posted to Canvas, and sent to your Rutgers email address. You are responsible for regularly checking your Rutgers email address, or forwarding your Rutgers email to an address that you do check on a regular basis.

EVALUATION CRITERIA AND POLICY:

1. *Midterm Exam* (25%).
2. *Final Exam* (25%).
3. *Quizzes* (20%).
4. *Homework* (20%).
5. *Participation* (10%)

Assignments and exams used to enhance your learning experience in this course include:

1. **Readings:** You are responsible for the material covered in the book *prior to attending class*. Please note that the week's readings are specified in the class schedule on the following pages. In addition to these readings, the professor may assign supplemental readings throughout the semester. These supplemental readings do not appear on the schedule as these readings will be assigned at the professor's discretion.

2. **Exams:** One mid-term exam and one final exam will be given on the material covered in the class and on the assigned readings. Exams will be based on the readings, material discussed in class, quizzes, and homework assignments.

3. **Quizzes:** Four quizzes will be given throughout the semester and will require that you read and respond to material in the textbook as well as work out mathematical/statistical procedures discussed in class.

4. **Homework:** Students will be responsible for the completion of four homework assignments. The purpose of the assignment is to assist students in applying their understanding of the

statistical procedures discussed in class as to well as to provide an opportunity for students to respond to the readings.

Due Dates: Homework problems assigned throughout the semester are due on Mondays by 8am. The midterm will be administered during our regular class hours, and the final will be administered during Finals Week (exact date: TBD).

Lateness: It is expected that students will turn in all homework assignments and exams on or before the due dates. **NO late homework or exam will be accepted** unless you receive prior approval by the professor AND have an official document that excuses you from meeting the deadline (e.g., a note from the ODOS or a doctor treating your illness/injury). In rare circumstances where an alternative arrangement for a missing homework assignment or exam is necessary, it needs to be discussed with the professor prior to the due date.

Academic Integrity: Each student's homework and examinations must be done independently. You are allowed to discuss with each other orally about the assignments and its relation to materials covered in class, but you are to complete your own work. Looking at or copying other's work is strictly forbidden, and if found, all students involved will receive a 0 on that assignment. **All incidents of academic dishonesty are reported to the HRM Program, the SMLR Academic Integrity Facilitator, as well as the Rutgers University Office of Student Conduct.** All academic integrity violations are retained in a student's records for 10 years and will be disclosed to any employer or graduate school that requests that information. Consult the official Rutgers University document entitled "Academic Integrity at Rutgers University" regarding your responsibilities for maintaining academic integrity: http://academicintegrity.rutgers.edu/.

Participation: The classroom environment we cultivate is important for the success of this course, and it is a function of each of our contributions. Active participation and engagement are more than showing up to class and talking, it includes actively contributing to a professional environment. As a result, I will define participation in this course as the following code of professionalism:

Nine Class Rules for Professionalism:

1. Actively participate and engage [zoom sessions, coursework, and in-class quizzes]
2. Treat each other and professors with respect
3. Respect time (e.g., arrive on time, remain present until the end)
4. Focus on present people, responsibilities, and activities (be present physically and mentally)
5. Be Persistent – mastery of analytics requires deliberate practice, directed feedback, and honest self-reflection.
6. Demonstrate proactivity in problem solving, asking questions, and project scoping
7. Take ownership of projects and assignments
8. Communicate with others in a timely and appropriate fashion
9. Be Agile – be comfortable with uncertainty, be able to rapidly adjust to change, and be resilient.

If you are disruptive in class, engaged in counterproductive activities (e.g., social media, unrelated web browsing, side conversations), and so on, you will not earn participation points.

Many class activities will involve your personal laptop. You are not to use class time to browse websites, spend time on Facebook, Twitter, or other social media, or email. Additionally, you should not send/receive text messages or engage in any other phone/computer activities that are unrelated to class.

Students are expected to attend all class meetings. If a circumstance arises where you will need to miss lecture, then please contact me in advance by email.

Grading System: Grades will be assigned using the following scale. No curve or score adjustments will be given.

Letter Grade	Percentage of Points	Letter Grade	Percentage of Points
A	100 % to 90%	**C+**	75% to 79.9%
B+	85% to 89.9%	**C**	70% to 74.9%
B	80% to 84.9%	**F**	< 70%

ACCOMMODATIONS: I am committed to providing a welcoming and accessible classroom for all students. Students who are in need of accommodations due to a disability should provide me with the appropriate documentation from the Office of Disability Services for Students as early in the semester as possible, and definitely before the first exam.

> ***University Statement on Accommodations:*** "Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation:https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your professor and discuss the accommodations with him as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form."

COURSE QUESTIONS: Should you have any administrative questions about homework, exams, due dates, etc., please take the following steps: 1) first check the syllabus; 2) next, you can check the CanvasChat to see whether others may have had the same question. 3) If your question has not been asked or answered, then you can pose your question in the CanvasChat. 4) If you do not receive a response to your question within 24 hours, then you should email the professor via Canvas.

ONLINE COURSE ASSESSMENT: Your constructive assessment of this course plays an indispensable role in shaping education at Rutgers. Upon completing the course, please take the time to fill out the online course evaluation.

INTELLECTUAL PROPERTY OF COURSE MATERIAL: All materials generated for this class, including but not limited to the syllabus, in-class materials, and exercises, may not be copied, sold or made available to third parties (including note-taking services), published, broadcasted, reprinted, included in your blog, posted on any websites or sent via text messaging from your phone without the explicit written permission of the professor. Any material that is distributed without such consent will be seen as a direct violation of academic integrity.

Class Schedule

Subject to modification at professor's discretion. You will be notified of any changes.

Week	Date	Topic	Reading	Assignment Due
1	9/8	Statistics or Sadistics? It's Up to You	Syllabus Chapter 1	
2	9/13	Means to an End: Computing and Understanding Averages; Vive la Différence: Understanding Variability	Chapters 2 & 3	
3	9/20	A Picture Really Is Worth a Thousand Words	Chapter 4	Quiz #1
4	9/27	Ice Cream and Crime: Computing Correlation Coefficients	Chapter 5	Homework #1
5	10/4	Just the Truth: An Introduction to Understanding Reliability and Validity	Chapter 6	
6	10/11	Hypotheticals and You: Testing Your Questions; Are Your Curves Normal? Probability and Why It Counts	Chapters 7 & 8	Quiz #2
7	10/18	Significantly Significant: What It Means for You and Me; Only the Lonely: The One-Sample Z Test	Chapters 9 & 10	Homework #2
8	10/25			MIDTERM EXAM
9	11/1	*t*(ea) for Two: Tests Between the Means of Different Groups; *t*(ea) for Two (Again): Tests Between the Means of Related Groups	Chapters 11 & 12	
10	11/8	Two Groups Too Many? Try Analysis of Variance	Chapter 13	Quiz #3
11	11/15	Two Too Many Factors: Factorial Analysis of Variance	Chapter 14	Homework #3
12	11/22	Testing Relationships Using the Correlation Coefficient	Chapter 15	
13	11/24			WINTER BREAK
14	12/6	Predicting Who'll Win the Super Bowl: Using Linear Regression	Chapter 16	Quiz #4
15	12/13	Chi-Square and Some Other Nonparametric Tests	Chapter 17	Homework #4
16	TBD			FINAL EXAM