



HR Data Based Decision Making: HR DEC MAK: DBD 38:533:542:01
School of Management and Labor Relations
Fall 2025

Wednesday at 7:20-10:10pm (synchronous online)

Thursday at 4:30pm-7:10pm (in-person)

Professor: Professor Nichelle Carpenter, Ph.D.
Email: nichelle.carpenter@rutgers.edu
Course Meeting: **Time:** Thursday 4:30pm-7:10pm ET
Location: JLB 102 (this is an in-person course)
Canvas Website – for lectures
Zoom Classes: see Zoom tab in Canvas to join Zoom classes

Student Hours: **Virtual office hours are held each week on ZOOM.** If the available times described below do not work for you, no worries. Send me an email to find a time that works best for you. There also may be weeks where I have a meeting that conflicts with these times – I will update you on the new times. **Please use the Calendly link below to reserve a time slot**

Day and Time: Tuesdays 4:15-5:15p or by appointment **Zoom link:**
<https://rutgers.zoom.us/my/nc742?pwd=dEtITkFSOFo5NGhKM2F6RlRqc2FpZz09>
Schedule here: <https://calendly.com/prof-carpenter/15min>

Course Website: Canvas.rutgers.edu
I will provide all lectures and course-related information through our course canvas website. Please get into the habit of checking canvas on a consistent basis.

Required Textbook: Salkind, N. J. (2022). *Statistics for People Who (Think They) Hate Statistics*. Sage Publications, Inc. Print ISBN: 978-1-0718-0388-2, E-book ISBN: 978-1-0718-0624-1.

Required Materials You may use the 2017 edition or later versions of the textbook.
You MUST use Microsoft Office (at least Excel) for projects and data analysis. Do not use Google Sheets to analyze your data and complete your project.

Students can obtain free access to Excel through the University Software Portal: <https://software.rutgers.edu/info/login/>

Once you have Microsoft Excel, enable the Data Analysis ToolPak. It's easy to do, and here is a source that can help:

<https://support.microsoft.com/en-us/office/load-the-analysis-toolpak-in-excel-6a63e598-cd6d-42e3-9317-6b40ba1a66b4>

Course Description and Objectives

In this course, students will learn important statistical concepts and analyses that are critical to Human Resource Managers. Several methods and analyses are necessary for HR professionals to evaluate important HRM questions and issues; students in this course will learn statistics that are often used to interpret and evaluate organizational situations and phenomena. At the end of this course, students will be able to (a) develop and test research questions relevant for the organizational context; (b) critically evaluate quantitative information and illustrations you encounter; (c) communicate your understanding of statistics to others; and (d) perform common statistical analyses in Microsoft Excel.

Specifically, at the end of this course, students are expected to do the following:

1. Navigate simple and complex datasets
2. Propose relevant research questions and hypotheses
3. Identify appropriate data and statistical tests for many HR problems and decisions
4. Analyze data with Excel
5. Interpret the meaning of statistical tests
6. Create professional illustrations (e.g., tables, figures) of statistical results
7. Communicate (in writing) the findings of your analyses to others
8. Critically evaluate and interpret quantitative information



Fall 2025 Course Structure

- Each week you will view a series of lectures and demonstrations (at your desired pace) and complete a quiz on Canvas. These lectures and demos should be completed before our required session.
- During class, we will complete more demonstrations and work on projects. This means that we will meet live during our class time.
- I expect you to complete the assigned readings, lectures, demonstrations, and quizzes prior to class. We will use our class time to answer questions, lead more demonstrations, and provide feedback.
- Stay home if sick – Please do not risk others' health by attending class when you are ill. If this applies to you, please reach out to the professor as soon as possible.

*Note, that there may be occasions where an asynchronous online lecture is provided to supplement course material. These lectures will be posted and announced on Canvas

Please note that all remote sessions and office hours will be on Zoom. If you need any help connecting to Zoom, please contact the RU Help Desk (833-648-4357).

Basis of Evaluation

1. Individual Projects (average of 3 projects) = 250 points	50%
2. Quizzes (10 quizzes [includes one bonus]) = 150 points	30%
3. Attendance and Participation = 100 points	20%
Total: 500 points	100%

Grades will be assigned according to the traditional cut-offs used at Rutgers:

90-100%	= A
85-89.9%	= B+
80-84.9%	= B
75-79.9%	= C+ (this is minimum for passing)
70-74.9%	= C
< 70%	= F



Individual Projects (3) – 250 points total (50%)

Throughout the semester, you will complete **three individual projects**. Each project will require you to conduct analyses, answer questions, create tables/figures, and provide a written deliverable. I will provide you with a real-world dataset that will be used to complete each of the projects. Although I will provide coaching as you complete your project, you should plan to spend time outside of class working on each project. Each project is worth 250 points – Final project grade is the average of the three projects (**Total project grade is 250 points**)

Scope of Projects:

- **Project #1:** Descriptive Statistics. You will analyze descriptive statistics (e.g., mean, standard deviation, frequencies) for variables, create appropriate tables and figures (e.g., histograms), and provide a 1-page (single-spaced) write-up (MAXIMUM) of your findings and interpretations.
- **Project #2:** Inferential Statistics. You will use the data to evaluate reliability information (e.g., alpha), and conduct inferential tests (e.g., t-test, ANOVA). You will also create appropriate tables and figures to illustrate the findings. Finally, you'll provide a 1-page (single-spaced) write-up (MAXIMUM) of your findings and interpretations.
- **Project #3:** Correlation and Regression. You will use the data to conduct correlation and regression analyses to answer questions about validity, reliability, and other research questions. You will also create appropriate tables and figures to illustrate the findings. Finally, you will provide a 1-page (single-spaced) write-up (MAXIMUM) of your findings and interpretations

Importantly, these are **individual projects**. While I expect you to ask your peers questions about the projects and even work together to figure out how to approach the assignments, **THE WORK YOU SUBMIT MUST BE YOUR OWN**. This includes analyses, writing, and tables/figures.

You must submit your project through Canvas. All submitted assignments will be evaluated via Turnitin. Please see policies regarding integrity breaches for more information about consequences of cheating and plagiarism.

Project Information continues on the next page:

APA style:

You are required to use APA style for your written deliverables and presentations. This is most relevant for formatting, tables, and figures. For example, your executive summary will be on the first page of your project, and ALL tables and figures will follow in an appendix. It is imperative that you familiarize yourself with the requirements throughout the semester (i.e., don't wait until the first assignment is due to figure this out). **See resources on Canvas so that you can ensure that you prepare your paper in the appropriate format.**

Briefly, all projects (including executive summary and illustrations) must be:

- **Typed (remember, 1 page maximum – this is required to earn 5 points)**
- **Contain 1-inch margins all around the document**
- **Use 12pt. Times New Roman font.**

Quizzes – 150 points (30%)

You will complete a quiz most weeks in this course. There will be nine quizzes administered on our canvas website. I also include a “free” quiz in the final quiz grade calculation (e.g., all students receive 100% on Quiz #10). Each week's quiz must be completed prior to the start of class (i.e., 4:30pm ET). These quizzes help you keep up with the readings and convey the key topics of each topic. These quizzes are to be completed individually, and you can use your notes or textbook to help you answer the questions.

Attendance and Participation – 100 points (20%)

I will take attendance in each class meeting (whether in-person or online). I also expect that you will review all class materials, lectures, and required media resources each week prior to attending class. This is important to ensure that we can make our in-class time active. To participate, actively participate and engage with the course materials – this means ask questions and respond to other students' questions. Be present and attentive during class sessions. Be proactive and persistent – you may need to watch or read materials a couple of times. Attend office hours! This also means working on projects early, not at the last minute.

Nine Class Guidelines for Professionalism

1. Actively participate and engage [zoom sessions, coursework, classroom participation]
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.

Late Submissions and *One FREEBIE*

I expect students to complete all assignments and quizzes on time. However, I will grant one FREEBIE - no questions asked (things happen). This means that you can submit ONE graded assignment up to 3 days late, with no penalty (i.e., you can use this on a project or quiz). **If you have an excused reason for submitting late, I encourage you to contact with me in advance of the due date to discuss a possible accommodation and possible adjustment to the late penalty.**

A Note about Extra Credit

Students often ask about extra credit – I do not have plans to offer any. I will not offer extra credit to a single student – it is not fair to the remaining students in the course.

A Note about Final Grades

It is important to know now that a “C+” is the minimum grade needed to pass this class in the MHRM program. If you are interested in pursuing the Analytics Concentration, a “B+” is the minimum graded required in this course.

As noted above, I offer all students FREEBIES, which allow you to submit an assignment late without penalty. It is possible to use a freebie for the final project - BUT it is your responsibility to ensure that all requirements for this course are completed at the end of the term. If not, then you will receive either an “incomplete” or your current grade (with zeros for any missing work).

A Note about Communication (a lot of notes, I know)

I offer freebies because I understand that things can happen during the course of a semester. However, **it is your responsibility** to communicate with me if you are dealing with a situation that is severely impacting your presence or performance in the class. Please communicate early rather than at the end of the semester.

A Note about Practice Problems

There are practice problems at the end of each book chapter – these are optional, yet I suggest that you complete them as they may be helpful for quizzes.

Requests for Reconsidering a Grade

If you have questions about the evaluation or grade that your work earned, please ask in writing to have it reviewed again and the grade reconsidered. You have seven days from the time you receive the grade to make the request. I will provide a decision within 7 days of your initial request. To do this, prepare a written statement (one or two paragraphs) explaining what you believe to be erroneous about the grade (e.g., reference specific examples in your submission and describe 1-2 points why it is correct). **Please recognize that a new grade could be lower or higher than the original grade.**

Other Important, Miscellaneous Things

Accommodations

Students requesting accommodations for disabilities should first contact the Office of Disability Services to determine their Coordinator. The Coordinator will then provide documentation to the student. Upon review and approval, the student must then provide this documentation to the instructor. Please refer to the Office of Disability Services for Students for more detail regarding this policy: <https://ods.rutgers.edu/>.

*****APA style – this is necessary for all written work in this course!*****

As stated in the section regarding your individual projects, you are required to use APA style for your written deliverables (where applicable). This is most relevant for formatting, in-text citations, reference lists, tables, and figures. It is imperative that you familiarize yourself with the requirements throughout the semester (i.e., don't wait until the first assignment is due to figure this out).

Again, all projects must be:

- **Typed (and 1 page maximum)**
- **Contain 1-inch margins all around the document**
- **Use 12pt. Times New Roman font**

Here are some websites that you should consult for further assistance (more materials are located on our Canvas website):

- https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html
- https://owl.purdue.edu/owl/research_and_citation/conducting_research/evaluating_sources_of_information/where_to_begin.html
- <https://apastyle.apa.org/>

Academic Integrity

Rutgers University takes academic dishonesty very seriously. By enrolling in this course, you assume responsibility for familiarizing yourself with the Academic Integrity Policy and the possible penalties (including suspension and expulsion) for violating the policy. As per the policy, all suspected violations will be reported to the Office of Student Conduct.

Students are responsible for understanding and abiding by their program and instructors' guidance or rules on the use of AI. As noted in Rutgers Academic Integrity Policy 10.2.13, **the principles of academic integrity require that you ensure that the work you submit is your own and was created without the aid of "impermissible technologies, materials, or collaborations."**

Using generative AI (e.g., ChatGPT) to analyze your data, interpret your results, write your executive summary, etc., is cheating and will result in example sanctions such as:

- A failing grade ("ZERO") on an assignment
- A grade reduction on an assignment



- Requirement to resubmit or complete an alternate assignment
- A failing grade in the course

Academic dishonesty includes (but is not limited to):

- Using AI (like ChatGPT) to analyze your data, write your executive summary, etc.
- cheating
- plagiarism
- aiding others in committing a violation or allowing others to use your work
- failure to cite sources correctly
- fabrication
- using another person's ideas or words without attribution
- re-using a previous assignment
- unauthorized collaboration
- sabotaging another student's work

If in doubt, please consult the instructor. Please review the Academic Integrity Policy at: <https://nbacademicintegrity.rutgers.edu/>.

Media Policy

The recording and transmission of classroom lectures and discussions by students is prohibited without written permission from the class instructor and all students in the class as well as guest speakers have been informed that audio/video recording may occur. Recording of lectures or class presentations is solely authorized for the purposes of individual or group study with other students enrolled in the same class. Permission to allow the recording is not a transfer of any copyrights in the recording.

The recording may not be reproduced or uploaded to publicly accessible web environments. You cannot share any part of any recording without express written permission by all parties potentially affected by the recording.

Recordings, course materials, and lecture notes may not be exchanged or distributed for commercial purposes, for compensation, or for any other purpose other than study by students enrolled in the class. Public distribution of such materials may constitute copyright infringement in violation of federal or state law, or University policy. Violation of this policy may subject a student to disciplinary action under the University's Standards of Conduct.

*Exception:

It is not a violation of this policy for a student determined by the Learning Needs and Evaluation Center ("LNEC") to be entitled to educational accommodations, to exercise any rights protected under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, including needed recording or adaptations of classroom lectures or materials for personal research and study. Such recordings of lectures or class presentations is solely authorized for the purposes of individual or group study with other students enrolled in the same class. Permission to allow the recording is not a transfer of any copyrights in the recording. The restrictions on third party web and commercial distribution apply in such cases.

**Destruction of Approved Recordings:**

Students must destroy recordings at the end of the semester in which they are enrolled in the class unless they receive the instructor's written permission to retain them or are entitled to retain them as an LNEC-authorized accommodation.

Fall 2025 Course Schedule
Thursday 4:30-7:10pm (JLB 102)

Week	Date	Location	Class Topic	What is due before class?
1	9/4	In-person	Welcome and Central Tendency What's in the syllabus? What are important terms to know in this course? How do I familiarize myself with Excel?	Read: Ch. 1 & 2* Make sure Data Analysis Tool for Excel is installed
2	9/11	In-person	Central Tendency and Variability How to describe data using statistics Excel Demo: Run and illustrate descriptive stats Note: Project #1 and dataset posted and discussed	Read: Ch. 1-4 Quiz #1: Ch. 3 & 4 (please note that chapters listed for quizzes are for the 5 th edition of the textbook, they will be different in other versions of the textbook)
3	9/18	In-person	Illustrating and Writing about Data How to describe data using illustrations and words Excel Demo: Practice examples with dataset	Read: Ch. 5 Quiz #2: Ch. 5
4	9/25	Zoom	Project #1 Coaching Troubleshooting Project #1: bring your questions and concerns. This class is optional and will be recorded.	Read: none
5	10/2	In-person	Correlation (and Reliability/Validity) How to describe and analyze data using correlations Excel Demo: Practice creating/interpreting correlation matrices and scatterplots	Final Project #1 due by 4:30pm Read: Ch. 6 Quiz #3: Ch. 6

Commented [NCC1]: Nichelle - update page/chapters based on new textbook. Update quizzes based on new textbook. Double check the new order of middle topics

6	10/9	In-person	Reliability and Validity What is the difference between reliability and validity? How to provide evidence of reliability and validity Excel Demo: Practice examples with dataset Note: Project #1 grading and feedback posted to Canvas by 10/14	Read: Ch. 7 Quiz #4: Ch. 7
7	10/16	In-person	Hypothesis Testing and Probability (and T-test) What are inferential statistics? What is the null versus research hypothesis? Excel Demo: There's not much to demo here, but bear with me ☺ Discuss Project #2 Instructions	Read: Ch. 8 (hypotheses) Ch. 9 (probability – skim) Ch. 10 (inferential testing) Quiz #5: Ch. 8 & 10
8	10/23	In-person	Independent Samples t-test What are similarities/differences in the types of t-tests? What research questions are answered with t-tests? Excel Demo: Conduct/interpret t-tests	Read: Ch. 12 & 13 Quiz #6: Ch. 12 only
9	10/30	Zoom	Project #2 Coaching Troubleshooting Project #2: bring your questions and concerns. This class is optional and will be recorded.	Read: Ch. 14 (review Ch. 8 and 10) Quiz 7: Ch. 14
10	11/6	Zoom	Regression [and revisit Correlation] What is the difference between correlation and regression? What research questions are answered with simple regression? Excel Demo: Conduct/interpret/write up simple regression Note: We will discuss Project #3 instructions	Read: Ch. 16 and 17 (you should also review Ch. 6) Quiz #8 and 9: Ch. 16 and 17 Final Project #2 due by 4:30pm
11	11/13	In- Person	Multiple Regression What is the difference between simple and multiple regression? How to interpret slopes and intercepts of model Excel Demo: Conduct/interpret/write up multiple regression Note: Project #2 grading and feedback by 11/18	Read: Ch. 16 & 17 Quiz #10: No Quiz (this week is freebie)

12	11/20	In-person	Multiple Regression (continued) What is the difference between simple and multiple regression? How to interpret slopes and intercepts of model Excel Demo: Conduct/interpret/write up multiple regression	Read: Ch. 16 & 17 No Quiz
13	*** Tuesday 11/25	Zoom	Wrapping up DBD (almost)	Read: None No Quiz
14	12/4	Zoom	Project #3 Coaching Troubleshooting Project #3: bring your questions and concerns. This class is optional and will be recorded.	Last class
15	12/11	--	No Class – Final Project Submission Note: Project #3 grading and feedback by 12/19	Project #3 Due by 4:30 pm ET

* Note that our normal 11/27 class falls during Thanksgiving Break – per the academic calendar, our class is moved to Tuesday 11/25. This class will be held on Zoom.