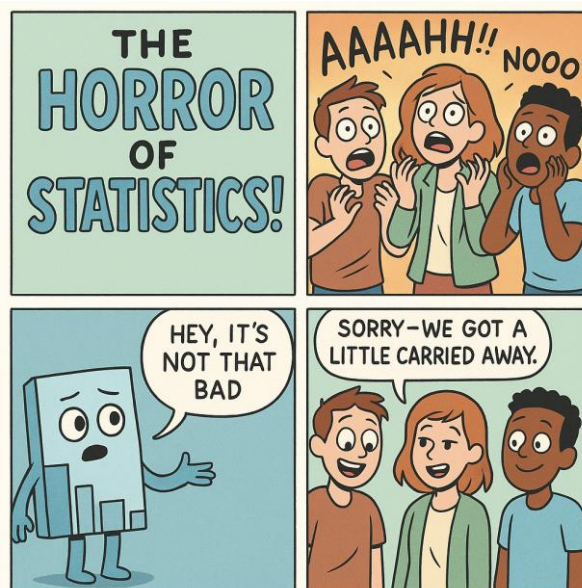


COURSE SYLLABUS

Rutgers University, School of Management and Labor Relations
Statistics for Human Resource Management
37:533:440:E1
Summer 2026



Instructor:	Rania Elanwer, Ph.D.
Email:	re308@rutgers.edu
Course Meeting:	Asynchronous
Student Hours:	By Appointment
Course Website:	Canvas.rutgers.edu (please regularly check Canvas for syllabus, course info, and other announcements)
Required Course Materials:	<p>The course materials include the interactive text, <i>Informed Decisions Using Data, Seventh Edition</i>, by Michael Sullivan III, along with the accompanying MyLab Statistics platform, an interactive learning, homework, and assessment tool.</p> <p>Please refer to instructions posted on Canvas in how to get access to the e-textbook and the MyLab Statistics Platform.</p> <p>Please note: This is an online e-book so no hard copy of a text will be required.</p>

Required Software:	<p>You are required to use Microsoft Office (specifically Word and Excel) for projects and data analysis. Students can access these tools for free through the University Software Portal: https://software.rutgers.edu/info/login/</p> <p>Once you have Microsoft Excel, please enable the Data Analysis ToolPak. The process is straightforward, and you can find guidance here: https://support.microsoft.com/en-us/office/load-the-analysis-toolpak-in-excel-6a63e598-cd6d-42e3-9317-6b40ba1a66b4</p>
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COURSE DESCRIPTION:

This course introduces students to the foundational concepts and tools of statistics with an emphasis on statistical thinking and data-informed decision-making in HR contexts. Students will learn how to collect, organize, summarize, visualize, and interpret data using both numerical and graphical methods. The course also covers measures of central tendency, relationships between variables, linear regression, probability, and hypothesis testing. Throughout the course, students will develop the ability to apply statistical techniques to real-world HR questions and communicate findings clearly to support evidence-based decisions.

This is a fast-paced course that requires consistent engagement and practice. The concepts are introduced in a sequential way, with each topic preparing you for the next, so it is important to follow the course schedule, regularly review course materials, and actively participate in class activities. To be successful, students are expected to complete assignments on time and regularly review course concepts. I will provide extensive support throughout the semester, including guided examples, practice exercises, and additional learning resources. I am committed to supporting your success throughout the course and encourage you to reach out whenever you need clarification or assistance.

COURSE OBJECTIVES: The major objectives of this course are:

1. Understand the role of statistics and quantitative methods in organizational research and decision-making.
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.
6. To learn to apply statistical concepts, scientific reasoning, and logic to organizational problems, such as adverse impact or discriminatory hiring decisions.

SMLR Learning Objectives: Statistics for HRM is designed to specifically address the following SMLR learning goals:

II. Quantitative Skills:

Apply appropriate quantitative and qualitative methods for research workplace issues.

- Formulate, evaluate, and communicate conclusions and inferences from quantitative information
- Apply quantitative methods to analyze data for HR decision making including cost-benefit analyses, ROI, etc.
- Apply qualitative methods appropriately, alone and in combination with quantitative methods

III. Research Skills:

Demonstrate an ability to collect, analyze and synthesize information to make logical and informed decisions impacting the workplace. Use evidence to evaluate hypotheses, theories and approaches to workplace issues.

- Employ current technologies to access information, to conduct research, and to communicate findings
- Analyze and synthesize information and ideas from multiple sources to generate new insights
- Assess and critique relevant evidence and research findings
- Access high-quality historical, qualitative, and quantitative evidence or research
- Use evidence-based analysis to appraise the validity of various hypotheses, theories, and approaches to workplace issues

VI. Applications:

Demonstrate an understanding of how to apply knowledge necessary for effective work performance.

- Apply concepts and substantive institutional knowledge, to understanding contemporary developments related to work
- Understand the legal, regulatory and ethical issues related to their field
- Develop human resource management functional capabilities used to select, motivate, and develop workers
- Understand the internal and external alignment and measurement of human resource practices

COURSE POLICIES: I expect you to prepare for and be engaged in *all* course activities. Preparation and active engagement greatly enhance your learning as well as those of your classmates.

COURSE PORTAL: The Canvas learning management system will be the primary home for this course, so you must be familiar with this mode of interaction as it will house the syllabus, Lectures, 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.

In addition to Canvas, the course will utilize the MyLab platform associated with our e-textbook to deliver assignments and quizzes. Accordingly, please ensure that you have access to the MyLab platform and are able to navigate it effectively to complete all assigned coursework.

Summer 2026 Course Structure

I will have class materials posted online weekly. Each week, I expect you to complete the assigned readings, viewings, and/or assignments.

EVALUATION CRITERIA AND POLICY:

1. *Assignments* (25%).
2. *Exams* (50%).
3. *Group Project and Presentation* (25%).

Assignments:

Weekly assignments will be assigned throughout the course. Late submissions will not be accepted. However, each student is permitted one late assignment submission without penalty (a "freebie"). Any additional late submissions beyond this allowance will not be accepted under any circumstances.

Exams:

There will be three exams administered over the duration of the course. Make-up exams or late submissions will not be permitted. To account for unforeseen circumstances, the lowest exam score will be dropped, providing students the flexibility to miss one exam without penalty.

Final Group Project and Presentation (25%)

This group-based assignment allows students to apply statistical and analytical concepts learned throughout the semester in a collaborative setting. Students will analyze employee data, explore relationships between variables, develop predictive models, extract insights, and draw conclusions to provide actionable recommendations for HR professionals. The assignment is designed to evaluate students' ability to apply statistical methods to real-world HR data, interpret results, and support data-driven organizational decision-making. Two deliverables are required for this assignment:

Final Report: A concise report summarizing the group's analytics process, key findings, and insights. The report should include visualizations, regression outputs, and clear interpretations of the results.

Oral Presentation: A group presentation highlighting the analytics process, key findings, and HR recommendations based on the data analysis. The presentation should communicate insights effectively to an audience of peers and stakeholders.

Active participation to all group assignments is required. Please Note: Group project will include a peer assessment component. Students who do not contribute equally to the project, as compared to their group members, may receive a reduced grade or no points for the project.

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/>.

AI Use Policy: Using AI as a Learning Tool

AI tools, such as ChatGPT and similar platforms, can be helpful for learning when used appropriately. In this course, you may use AI to support your understanding of statistical concepts, review difficult topics, generate practice examples, or clarify course materials. However, **AI should not be used to complete assignments, quizzes, exams, projects, discussion posts, or any other graded work on your behalf. All submitted work must reflect your own thinking, understanding, calculations, analysis, and interpretation.**

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

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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 need accommodation 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.

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 me to discuss the accommodations as early in the course as possible. To begin this process, please complete the Registration form on the ODS website at: <https://ods.rutgers.edu/students/registration-form>.”

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.

RUTGERS DIVERSITY STATEMENT

The Division of Student Affairs works to create an environment of inclusion which respects and affirms the inherent dignity, value, and uniqueness of all individuals, communities, and perspectives. Our practices reflect awareness and understanding of the complexity of identity and the increasing interconnectedness of our world. It is our responsibility to promote and maintain a community of compassion, embracing the rich dimensions of diversity, and facilitating opportunities for understanding and the expression of both individual and shared truths.

Class Schedule Subject to modification at professor’s discretion.

Week	Date	Topic	Reading	Assignments Due
1	05/26	- Introduction to Statistics and Statistical Thinking - The Process of Implementing a Statistical Analysis Process in HR - Data Collection	Chapter 1	Assignment 1
2	06/01	- Organizing and Summarizing Data - Data Visualizations - Graphical Misrepresentation of Data	Chapter 2	Assignment 2 Exam 1
3	06/08	- Numerically Summarizing Data - Measures of Central Tendency	Chapter 3	Assignment 3
4	06/15	- Describing the Relation Between Two Variables - Linear Regression	Chapter 4	Assignment 4 Exam 2

5	06/22	- Probability - Hypothesis Tests Regarding a Parameter	Chapter 5	Assignment 5
6	06/29	- Group Project and Presentation	Chapter 10	- Exam 3 - Final Project - Oral Presentation