# **COURSE SYLLABUS**

## ${\bf Rutgers\ University,\ School\ of\ Management\ and\ Labor\ Relations}$

**Statistics for Human Resource Management** 

Rutgers University – Spring 2025 37:533:440:02 Thursdays, 10:20 AM- 1:20 PM

Instructor:	Rania Elanwer, Ph.D.			
Email:	re308@connect.rutgers.edu			
Course Meeting:	Thursday 10:20am-1:20pm at Lucy Stone Hall, Room B110			
Student Hours:	I will hold student hours each week in my personal ZOOM room:			
	- <b>Day and Time</b> : Wednesday from 10:00am-11:00am <a href="https://rutgers.zoom.us/my/re308">https://rutgers.zoom.us/my/re308</a> *If the available time does not work for you, no worries. Send me an email to set up an alternative time.			
Course Website:	Canvas.rutgers.edu (please regularly check Canvas for syllabus, course info, and other announcements)			
Required Course Materials:	The course materials include the <b>interactive text</b> , <i>Informed Decisions Usin Data</i> , <i>Seventh Edition</i> , by Michael Sullivan III, along with the accompanyin <b>MyLab platform</b> , an interactive learning, homework, and assessment tool.  Please note: This is an online e-book so no hard copy of a text will be required.			
	A TI-83 or TI-84 graphing calculator is also required for the class.			
Required Software:	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: <a href="https://software.rutgers.edu/info/login/">https://software.rutgers.edu/info/login/</a>			
	Once you have Microsoft Excel, please enable the Data Analysis ToolPak. The process is straightforward, and you can find guidance here: <a href="https://support.microsoft.com/en-us/office/load-the-analysis-toolpak-in-excel-6a63e598-cd6d-42e3-9317-6b40ba1a66b4">https://support.microsoft.com/en-us/office/load-the-analysis-toolpak-in-excel-6a63e598-cd6d-42e3-9317-6b40ba1a66b4</a>			

**COURSE DESCRIPTION:** This course is designed to introduce statistical concepts and analyses that are critical to Human Resource professionals. 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.
- 6. To learn to apply statistical concepts, scientific reasoning, and logic to organizational problems, such as adverse impact or discriminatory hiring decisions.

**COURSE POLICIES:** Attendance and active participation are *critical* to your success in this class, so *you are strongly urged to prepare for and participate in every class*. I expect you to prepare for and be engaged in *all* course activities and discussions. Preparation and active engagement greatly enhance your learning as well as those of your classmates.

If you do miss a class, it is *your responsibility* to contact another class member to get any material missed, including schedule changes. If you are absent from class, do not contact the professor for a complete review of the lecture that you have missed. Instead, contact another class member for the material, and then contact the teaching aide or the professor if you have difficulty with the material after you have reviewed the notes obtained from another student.

**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, 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* (25%).
- 5. Participation and Attendance (5%).

**Late Assignment Policy:** No late assignments will be accepted. To accommodate unforeseen circumstances, the lowest two quiz scores will be dropped. This allows you the flexibility to miss up to two quizzes without penalty.

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: <a href="http://academicintegrity.rutgers.edu/">http://academicintegrity.rutgers.edu/</a>.

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

<b>Letter Grade</b>	Percentage of	Letter Grade	Percentage of
	Points		Points
A	100 to 90	C+	75 to 79.9
B+	85 to 89.9	С	70 to 74.9
В	80 to 84.9	F	< 70

**ACCOMMODATIONS:** I am committed to providing a welcoming and accessible classroom for all students. Students who need 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 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	01/21	Introduction to Statistics and Statistical Thinking	Chapter 1	Assignment 1
2	01/27	Data Collection	Chapter 1	Assignment 2
3	02/03	Organizing and Summarizing Data	Chapter 2	Quiz 1
4	02/10	Data Visualizations Graphical Misrepresentation of Data	Chapter 2	Assignment 3
5	02/17	Numerically Summarizing Data Measures of Central Tendency	Chapter 3	Quiz 2
6	02/24	Numerically Summarizing Data Measures of Position and Outliers	Chapter 3	Assignment 4
7	03/03	Describing the Relation Between Two Variables	Chapter 4	Quiz 3

8	03/10			MIDTERM		
SPRING BREAK						
9	03/31	Probability	Chapters 5			
10	04/07	Discrete and Normal Probability	Chapter 6 Chapter 7	Quiz 4		
11	04/14	Sampling Distribution	Chapter 8	Quiz 5		
12	04/21	Estimating the Value of a Parameter	Chapter 9	Quiz 6		
13	04/28	Hypothesis Tests Regarding a Parameter	Chapter 10	Quiz 7		
14	05/05	Linear Regression	Chapter 14	Assignment 5		
Final	05/12			FINAL EXAM		