



People Analytics 37:533:354.90: Fall, 2025

Instructor: Ralph A. Rodriguez, Ph.D., SPHR

Virtual "Office": <https://rutgers.webex.com/meet/rar224>

Office Hours (All times EST):

- TUESDAYS 8:00-9:00 PM EST and THURSDAYS 3:00-4:00 PM EST; also by Appointment (in my PUBLIC WebEx Room (see above))
- Request Appointments via Canvas portal

Email: ONLY via Canvas portal; ALL correspondence in the course should be via Canvas, NOT through direct university email addresses

TA: TBA; Office Hours with the Professor by Appointment (email via Canvas portal)

People Analytics 37:533:354:90	Fully Asynchronous	I am eager to support you as you progress through this course! Please come see me during scheduled office hours.
-----------------------------------	-----------------------	--

ACTIVE ENGAGEMENT: This is a fully online, asynchronous course. This type of delivery has distinct advantages which I attempt to enhance and some natural disadvantages which I seek to neutralize. In order to make this work, you **MUST** stay current with the Modules. You must diligently and **ACTIVELY** view the training videos in preparation to submit **ALL** assignments, including quizzes, on time. If you know that you are going to experience challenges in this area, please alert me well ahead of time. Note that even "excused" delays will impact your ability to stay current because of the linearity of logic and math-based material. Failing to stay engaged is certain to have an impact on both your understanding and your grade.

CRITICAL INTRODUCTORY NOTE:

Many students come into this course with some degree of trepidation. Many plainly believe and would readily admit "I'm just not good at math". Well... here is the good news. **THIS COURSE IS NOT TAUGHT AS A**

“MATH” COURSE. Furthermore, this is not a course where what you “are” matters nearly as much as what you DO. If you put a good effort into the track I have established for you, you will be absolutely amazed about how much you will learn about People Analytics. You will often hear me say “hours equals points”. If you don't choose to invest time, you will not do well in this course. So... for those of you who are confident in your math skills, don't get cocky! If you do choose to invest the time, you will be amazed at what you are able to learn... CONTENT and SKILLS that will increase your chances to get the professional opportunity of your dreams... and actually “make a difference” that makes a difference to both employees and organizations.

So... work hard, persevere through the challenges (seek us, the T/A and me, for help as the need arises), and take advantage of the several opportunities that will be offered to improve your grade.

PARTICIPATION: Your active participation will be required throughout this course, particularly because it is asynchronous. You will have ample opportunity to engage with the subject, your colleagues in the class, and me. I will assess your participation throughout according to the following standards. These assessments will be factored into your semester grade as potential EXTRA CREDIT.

- a. Only students who added value to the course by their participation will earn “A”s
- b. Students who exhibit some sign of full engagement will be awarded grades at the “B” level
- c. Students who mostly do what is expected from them without any obvious signs of engagement will be awarded grades at the “C” level
- d. Students whose participation is characterized by a lack of participation will be assessed at a “D” level
- e. Attendance at “Office Hours” can result in significant increases to a Module's Participation grade and is certain to contribute to greater understanding of this material.

Course Overview: People analytics is a data-driven approach to improving people-related decisions for the purpose of advancing both individual and organizational success. While some degree of quantitative decision-making has always been critical to the success of organizations, many business leaders still make many/most of the key decisions about their workforce based on intuition, experience, advice, and guesswork. However, today's leaders can improve their people decision-making based on the collection and systematic analysis of data. In this course, we will explore a number of strategies used to attract and retain top talent and illustrate how these strategies are being designed and used at cutting-edge companies. In doing so, we will examine and discuss examples of organizations and company projects that address key people-related issues, such as recruiting and hiring, performance evaluation, promotion and training opportunities, compensation, and organizational change. Our focus in this course is on the strategies that can be used to successfully design and implement people analytics in an organization. We will draw on the latest company practices, research projects, and cases studies—all with the goal of helping you deepen your understanding of how people analytics can be applied in the real world. In so doing, we will cover the most important aspects of human resource management. We will begin by covering basic tools and principles to help you learn about the primary statistical tools used in people analytics. Next, we will focus on how to apply those basic tools and principles when hiring, evaluating and rewarding performance, managing careers, and implementing organizational change. By learning about strategies for people analytics, you will not only equip yourself to advance a company's business objectives through the strategic management of people, but also your own career.

Course Pre-Requisite(s): A first course in statistics that includes descriptive statistics, probability, hypothesis testing, the t-test, ANOVA, correlation, and regression. A brief review of these topics is included in the very beginning of the course BUT only as a “refresher”, meaning that you are expected to already have a foundation to build upon. It will also be helpful if you have some experience using Excel and/or SPSS, although they are in no way required at the inception of the course.

Course Goals: The goal of this course is to prepare you to knowledgeably collect, organize, and use data to manage people at work. Upon successful completion of this course, you will have:

- A working familiarity with the most relevant topics general managers face concerning the management of people;
- A command of a set of frameworks and theoretical models to help you make key employee decisions;
- A knowledge of some of the most cutting edge techniques used by companies to analyze data about their employees in order to make their organizations and their individual employees more successful; and
- The ability to interpret (and present) the results of your analyses to plan and effectuate strategic people-related decisions.

COURSE OBJECTIVES:

My Goals in Teaching This Course:

1. To develop in YOU the ability to reason analytically and critically.
2. To provide YOU an understanding of basic business research methods and develop YOUR ability to be conversant regarding business research decisions.
3. To provide YOU with the necessary tools for planning and designing business research.
4. To provide YOU with the necessary tools for evaluating and understanding business research.
5. To develop in YOU the ability to communicate original research and critique existing research clearly and incisively through oral presentation and writing.
6. To increase YOUR comfort and facility with statistical methods and the use of technology as a research and communication tool.

My ADDITIONAL Goals for YOU:

Upon completion of this course, YOU will have improved your knowledge base and skill level by understanding:

1. The fundamentals of sampling and probability and the role they play in inferential statistics.
2. The use and calculation of descriptive statistics.
3. The use and calculation of statistics testing significant differences.
4. The statistics of relationships among variables and causality.
5. The interpretation of statistics commonly used by human resource professionals.
6. How to make better human resource decisions with statistics.
7. How to explain analysis outputs both orally and in writing.

In addition, YOU will develop a documentable and resume-enhancing facility with SPSS in:

1. Creating a dataset.
2. Defining variables.
3. Transforming variables and creating new variables.
4. Performing all statistical analyses covered in the course using SPSS.
5. Interpreting SPSS output.

SMLR Learning Goals: People Analytics is designed to specifically address sections of five of the SMLR Learning Goals:

- I) **Written & Oral Communication – Communicate effectively at a level and in modes appropriate to an entry level professional.**
 - o Communicate complex ideas effectively, in standard written English
 - o Analyze and synthesize information and ideas from multiple sources to generate new insights
 - o Produce quality research papers with proper convention of attribution/citation

- o Produce high quality executive summaries
- o Make an argument using contemporary and/or historical evidence
- o Present ideas and arguments in a logical and effective way
- II) **Quantitative Skills – Apply appropriate quantitative and qualitative methods for research workplace issues.**
 - o Formulate, evaluate, and communicate conclusions and inferences from quantitative information
 - o Apply quantitative methods to analyze data for HR decision making including cost-benefit analyses, ROI, etc. (HRM)
 - o 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.**
 - o Employ current technologies to access information, to conduct research, and to communicate findings
 - o Analyze and synthesize information and ideas from multiple sources to generate new insights
 - o Assess and critique relevant evidence and research findings
 - o Access high-quality historical, qualitative, and quantitative evidence or research
 - o Use evidence-based analysis to appraise the validity of various hypotheses, theories, and approaches to workplace issues
- VI) **Application – Demonstrate an understanding of how to apply knowledge necessary for effective work performance**
 - o Understand the legal, regulatory and ethical issues related to their field
 - o Develop human resource management functional capabilities used to select, motivate, and develop workers
 - o Understand the internal and external alignment and measurement of human resource practices
- VII) **Professional Development – Demonstrate an ability to interact with and influence others in a professional manner, and to effectively present ideas and recommendations**
 - o Develop effective presentation skills appropriate for different settings and audiences
 - o Develop capabilities to work and lead in a multicultural and diverse environment
 - o Work productively in teams, in social networks, and on an individual basis
 - o Develop cultural agility competencies

Format of the Course: While this course will include lectures, a major component of it will be discussion-based, reflective, and documented in writing, involving the detailed analysis of several cases. Interacting with me and with your peers is a vital part of your learning experience and is an important component of your grade (see the “PARTICIPATION” section earlier). You should prepare by analyzing the Module’s readings and case to participate in exercises, and to respond constructively to the ideas and comments of others. I will monitor “Discussions” to ensure dynamic dialogues, with every expectation that your interactions will be well-informed and well-reasoned. Effective discussion will require that you read and analyze the cases, be willing to share your ideas and experiences and, importantly, support and respond to your peers.

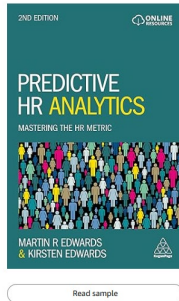
COURSE RESOURCES REQUIRED and RECOMMENDED:

Two texts are **REQUIRED** and can be ordered directly from Amazon for rapid delivery. The digital versions are even less expensive with even quicker delivery. They are:

1. **The Data-Driven Leader: A Powerful Approach to Delivering Measurable Business Impact Through People Analytics**, Jenny Dearborn & David Swanson, Wiley, ISBN 978-1119382201. [Hardcover @\$19 (many used are available at much lower prices); Kindle @\$17.] This is a book-long case that we will periodically discuss during the semester that will provide a rich context for discussion and use of the substantial topics of the course. RESIST THE TEMPTATION TO GET THE “AUDIBLE” VERSION. IT DOES NOT INCLUDE ACCESS TO SOME VERY IMPORTANT CHARTS & TABLES.

https://www.amazon.com/Data-Driven-Leader-Delivering-Measurable/dp/1119382203/ref=tmm_hrd_swatch_0?encoding=UTF8&qid=&sr=

2. **Predictive HR Analytics (2nd ed.)**, Martin Edwards & Kristen Edwards, Kogan Page, ISBN 9780749484446. [Paperback @\$26 used on Amazon; at [Predictive HR Analytics: Mastering the HR Metric: 9780749484446: Human Resources Books @ Amazon.com](#). MAKE SURE THAT YOU GET THE 2ND EDITION!



The first 55 pages at the “Read sample” link on Amazon.

3. **REQUIRED SPSS Software:**

- a. **REQUIRED SPSS Software (Download after September 1, 2025):**

- i. This course makes use of **SPSS** for calculations for homework and exams. FREE access is available and may be found at [RU Software Portal - SPSS 30 Statistics Premium Edition w/Amos Individual License](#). I downloaded the software on my PC on August 21. The licensing directions are a bit tricky, so please allow for extra time, just in case you need to contact IT Services for help. **You MUST have this software package loaded and ready to use BEFORE the 2nd week of the course!** (Our R.U. license is currently “in-process”. But if it is not ready by the beginning of the course, you will still be able to download it under the “old” license until the new one comes in. Hopefully, the new license is renewed by the beginning of the course and this will be a non-issue.)

- b. **ADDITIONAL SPSS Resources:** I have sprinkled some excellent SPSS tutorials at appropriate points in the course Canvas site. When you are looking for specific functions or to complete specific Homework/Assignments, you will find an overwhelming wealth of additional resources on Youtube. These are, of course, free... but of uneven quality (although most are really pretty good). The SPSS package, itself, has a VERY GOOD “Help” function right on its primary menu (top, right).

4. In addition to readings in our two textbooks, several important short readings are assigned. You will find them in the appropriate Modules of our Canvas site.
5. Teaching videos of direct material are sprinkled throughout the Modules. These do **NOT** simply review assigned reading material... but supplement it with practical considerations that commonly face HR professionals in the application of People Analytics in their organizations. The earliest videos in the Modules review several statistical and research topics. Pay special attention, also, to a video that you will need to review on “Survey Design” and “Models”. You will find these in the appropriate Modules of our Canvas site.

Timeliness of Assignments, Quizzes, etc.: Timely participation in every Module is **required**. If you know you are going to experience some participation challenges, aim for completing the relevant assignment **ahead of time**. While your first exception will generously be excused, subsequent violations will be met with automatic 20-point penalties. In no case will an assignment that is later than 7 days be accepted without **verification of your appeal to the Dean of Students**.

Grading and Related Weights. Grades will consist of the following components:

	PERCENTAGE	Course Grade	CUM. PERCENTAGE
Midterm	20%	A	90%+
Final Exam	30%	B+	85-89.9%
Case Discussions, Exercises, etc.	25%	B	80-84.9%
Quizzes*	25%	C+	75-79.9%
		C	70-74.9%
		F	0-69.4%
TOTAL GRADE	100%		

Note Regarding Grading on Case Discussion: This course depends heavily on graded discussions in our virtual class. Therefore, active participation in class discussions is integral to receiving a satisfactory grade. Participation includes informed involvement/active participation in case discussions and exercises, and timely completion of readings/short assignments/exercises. While regular participation in case discussion is expected, the quality of student comments is key. Quality is judged based on your ability to contribute substantively to class discussion and to consider others' comments in advancing the discussion. All relevant perspectives are welcomed and I expect that all students will take advantage of the opportunity to actively participate in the course. Please prepare for each class interaction by doing the required reading according to the model/guidance provided in the particular assignments.

Almost EVERY Module will include a **Quiz** on the assigned reading for the Module. Your lowest TWO quizzes during the semester will be dropped. Under no circumstances will a Quiz make-up be administered.

In addition, two **Exams** will be administered. They will be based on the course readings, videos, and case discussions.

Lecture Notes: The PowerPoint slides for the lectures will be posted on the course's Canvas website. Do NOT expect the teaching videos to merely repeat the text, section-by-section! You can't "get" this material unless you actually DO IT. Therefore, you should expect the videos to be WORKSHOPS, where the most important parts of the textbook material are highlighted and elaborated on within the general context of the text, current practice, and the kind of skill development that will enhance your career development. **You are expected to actively ENGAGE with the video content, having already read and worked through the text and SAGE PUBLISHING'S Student Support Site. If you are vague on any area of the assigned readings, you are expected to have your questions reasonably formulated and bring them to me during "Office Hours".**

Academic Integrity: The rights of students will be protected to ensure that test scores are related to competence in the subject matter. Therefore, electronic comparison will be used to detect plagiarism and the use of ANY INTELLIGENCE that is not your own. If cheating is detected, it will be prosecuted to the limit allowed by University policies. YOU ARE RESPONSIBLE FOR KNOWING THE BOUNDARIES OF "PLAGIARISM." Generally, it includes submitting any work which does not originate from your own effort, without attributing proper credit.

THIS IS NOT A PASSIVE-LEARNING COURSE WHERE YOU LEARN BY READING AND REFLECTING. IN ADVANCE, BE ADVISED THAT THIS COURSE REQUIRES WORK, WHERE YOU WILL HAVE TO ACTUALLY "DO SOMETHING".

Frequently Asked Questions:

Are the Teaching Videos in this course pure summaries of the textbook? In a word, “NO!” The textbook contains a fairly comprehensive presentation of the material from a fairly “academic” perspective. While it is a VERY fine text (why else would I use it?), its perspective is somewhat flat. That is, every page seems to be as important as every other. While ALL of the Privitera text is important, some sections are HUGELY important to the HR professional. Therefore, please look at the text as foundational and the Teaching Videos as specific to your professional development.

Since this is an online class, will I have the opportunity to “meet” and engage with my other classmates? Of course! Opportunities are sprinkled through the entire course for some social but mostly course-related interaction with your colleagues.

How much “work” will this course require? This obviously depends on your prior experience with logic, mathematics, and HR decision-making (with LOGIC being much more important than memorizing formulas). The reading(s) will take you somewhere on the order of 40-60 minutes, the videos will take you between 60 to about 120 minutes, the quiz will take 15-25 minutes, and the homework/assignment will take anywhere between 30-90 minutes. You should be prepared to allocate 3-6 hours per week. Most importantly, be sure to NOT fall behind. Falling behind by even ONE Module will severely require super-human discipline and effort to catch up.

How are the Modules formatted? That is, what should I do to complete them and in what order? Each Module includes a PPT file that you should use to follow along with the Teaching Video(s), AFTER first reading the text. As appropriate to your needs, make use of the FREE publisher support materials at SAGE PUBLISHING’S Student Support Site. If you are vague on any area of the assigned readings, you are expected to have your questions reasonably formulated for time during “Office Hours” AND/OR posting them in the Chat Room. Then, do whatever assignments are included and, finally, complete the quiz(zes). **As indicated above, please allocate yourself 3-6 hours to complete this work. (For some students, even more time will be required in the earlier Modules.) NOTE: SOME STUDENTS PREFER TO WATCH THE VIDEOS FIRST AND, THEN, READ THE TEXT.**

What is the course lateness policy? This is simple. Work submitted late without an unavoidable, DOCUMENTED reason VALIDATED BY THE OFFICE OF THE DEAN OF STUDENTS will, completely at the discretion of the Professor, be heavily penalized. Continued tardiness will likely have a devastating impact on your final course grade. Therefore, be seriously engaged and do your work! If you need help, PLEASE visit me during “Office Hours”. I know that employer and family demands sometimes require even the most conscientious student to unavoidably fall behind. However, business trips and office/family functions are NOT valid reasons for not turning exercises in on time. Even “excused” absences are not valid reasons for work to not be completed and submitted as scheduled. If there is a concern for a date several weeks out, aim to get the related assignment submitted EARLY.

Can I work with another classmate to complete homework and assignments? Yes, PLEASE DO!!! **HOWEVER... YOUR** submitted work must be independently completed and submitted. That is, you may collaborate with each other but your final product must be completely independent of what your “partner” submits. **Any duplicative SPSS files will result in “0” grades for both parties.**

Do you have any final advice on how to do well in this course? Sure! From my perspective, it is really simple. Follow the track indicated in the modules. Read the text and watch the teaching videos. Do the homework, as assigned. Get help during office hours. I am ALWAYS happy to give you all the help you can stand! AND FINALLY... persevere! Don't give up!

I believe that this course is THE course that will make the difference between you either being a DECISION-MAKER or directions-follower in your career. While it will surely require significant work for most students, it also has the highest personal ROI for you. In T&D language, mastering the content in this course will significantly raise your HR-career upside.

Good luck in the course. I am committed to helping you establish a logical foundation that will equip you to solve sticky HR-related organizational problems using reliable and valid data.

******* ***** ***** ***** *******

THINGS YOU NEED TO KNOW ABOUT: RUTGERS UNIVERSITY-RELATED RESOURCES FOR YOU

Student resources – this link directs students to the appropriate resources if they are in need of help in the areas of (a) mental health, (b) academic coaching, and (c) financial assistance: <https://smlr.rutgers.edu/about-smlr/fall-2022-information-smlr-students>.

Scholarships – to ensure that all students are aware of SMLR's scholarship offerings, here is a link to our scholarships: <https://smlr.rutgers.edu/academic-programs/scholarships>.

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 instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form (<https://webapps.rutgers.edu/student-ods/forms/registration>) .

PLEASE DO NOT OFFER ANY EXCUSES OR ASK FOR ANY SPECIAL CONSIDERATIONS FOR THE REQUIREMENTS AND EXPECTATIONS SPECIFIED IN THIS SYLLABUS. THEY WILL NOT BE GRANTED. IF YOU ARE NOT PREPARED TO MEET THE INCLUDED EXPECTATIONS FOR THIS COURSE, YOU WOULD BE BETTER SERVED BY DELAYING IT UNTIL A TIME THAT YOU ARE SO ABLE.

People Analytics Fall 2025 Schedule

This is an **OUTLINE** of the course. Do **NOT** depend on this schedule for detailed planning. Those details are provided in the **Canvas Modules** for the course, which provide a linear, step-by-step sequencing of all course-related material and assignments (including quizzes, etc.).

Module	Title	TEXT: PHRA (Predictive HR Analytics) or DDL (Data-Driven Leader)	Videos	Additional Reading
Module #1 Sept. 2-7	Intro to the Course and Analytics Review of Descriptive Statistics (Central Tendency & Dispersion)		Descriptive Stats (C.T. & Dispersion)	Bersin on People Analytics 2016 (12 pp.) Deloitte 2017 Global Human Capital Trends (People Analytics section only, 12 pp.)
Module #2 Sept. 8-14	Review of Tests of Group Differences: The T-Test Review of Tests of Group Differences: ANOVA		T-Test Tutorial, ANOVA, SPSS	
Module #3 Sept. 15-21	Review of Tests of Association: Correlations & Regression		Correlation & Regression Videos	
Module #4 Sept. 22-28	Models & Survey Design; Exercise/Quiz DDL Case Discussion (Chapt. 1)	DDL Preface and Chapter 1: Playing the Blame Game (pp. xv-24)	Videos on H-testing & Survey Design	Survey Tips Booklet Does Engagement Really Drive Results (2 pp.) 51 HR Metrics (4 pp.)
Module #5 Sept. 29-Oct. 5	DDL Chapters 2-3	DDL Chapter 2: Leading with Business Outcomes (pp. 25-48) DDL Chapter 3: Starting with Analytics (pp. 49-82)		HBR: Competing on Talent Analytics (14 pp.) The Bias Undermining Your People Analytics HBR Dattner (5 pp.)
Module #6 Oct. 6-12	DDL Chapters 4-5	DDL Chapter 4: Early Discoveries (pp. 83-110) DDL Chapter 5: Diagnosing What's Wrong (pp. 111-146)		The Complications of Conducting Research (28 pp.)
Module #7 Oct. 13-19	Mid-Term Exam DDL Chapters 6-7	DDL Chapter 6: The Road Ahead (pp. 147- 174) DDL Chapter 7: Results Win Support (pp. 175-198)		
Module #8 Oct. 20-26	PHRA Chapters #1-2	PHRA Chapter 1: Understanding HR Analytics (pp. 1-9) PHRA Chapter 2: HR Information Systems and Data (pp. 10-56)		Does Firm Status Confer a Recruiting Advantage (Chapter 2; 26 pp.)

Module #9 Oct. 27-Nov. 2	PHRA Chapters #3-4	PHRA Chapter 3: Analysis Strategies (pp. 57-107) PHRA Chapter 4 (lite read)
Module #10 Nov. 3-9	PHRA Chapter #5	Chapter 5: Case Study #2 Employee Attitude Surveys- Engagement & Workforce Perceptions (pp. 144-189)
Module #11 Nov. 10-16	PHRA Chapter #6	PHRA Chapter 6: Case Study #3 Predicting Employee Turnover (pp. 190- 236)
Module #12 Nov. 17-23	PHRA Chapter #7	PHRA Chapter 7: Case Study #4 Predicting Employee Performance (pp. 237-284)
Module #13 Nov. 24-30	PHRA Chapter #8	PHRA Chapter 8: Case Study #5 Recruitment and Selection Analytics (pp. 285-318)
Module #14 Dec. 1-10	PHRA Chapter #10 REVIEW for FINAL EXAM	PHRA Chapter 10: Business Applications: Scenario Modelling & Business Cases (pp. 365-411)