RUTGERS
School of Management and Labor Relations

People Analytics: Spring 2021

Instructor: Ralph A. Rodriguez, Ph.D., SPHR
Office Hours: **TUESDAY 9:00-10:00 PM EST and THURSDAY 9:00-10:00 AM EST; also by Appointment (at my PUBLIC WebEx Room: 795-024-216)**
   o   **Request Appointments via Canvas portal**
Email: via Canvas portal   Telephone: (973) 500-8789

People Analytics 37:533:322	**Fully Asynchronous**	Weekly Modules via Canvas course site

Teaching Aide:
   Zixin "Ayla" Wang
   E-mail: via Canvas portal
   Office Hrs. By Appointment

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 people have always been critical to the success of organizations, many business leaders still make 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 addressing 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.

Course Goals: The goal of this course is to prepare you to wisely 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 make strategic people-related decisions.

SMLR Learning Goals: HR 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.
- Communicate complex ideas effectively, in standard written English
- Analyze and synthesize information and ideas from multiple sources to generate new insights
- Produce high quality executive summaries
- Make an argument using contemporary and/or historical evidence
- Present ideas and arguments in a logical and effective way

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.

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) Application – Demonstrate an understanding of how to apply knowledge necessary for effective work performance
- 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

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   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 important for your grade (see below). 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 and that your interactions are both well-informed and well-reasoned. Effective discussion depends on your advanced preparation, willingness to share your ideas and experiences and, as importantly, your support and responsiveness to your peers.

Required Readings and Videos: 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. Predictive HR Analytics (2nd ed.), Martin Edwards & Kristen Edwards, Kogan Page, ISBN 9780749484446. [Paperback @$48; Kindle (can be viewed on laptops/computers/phones)=approximately $40] https://www.amazon.com/Predictive-HR-Analytics-Mastering-Metric-ebook/dp/B07NZ7GT64/ref=sr_1_2?crid=1J5WIDLF2W9U5&keywords=predictive+hr+analytics&qid=1566402422&s=books&sprefix=predictive+hr+%2Caps%2C133&sr=1-2

2. 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 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=

3. **SPSS Software:** This course makes use of SPSS for calculation. SPSS ("Statistical Package for the Social Sciences") is available on computers in all RU computer labs and through the University Software Portal (https://software.rutgers.edu/product/3627). To access it, you will have to Login to the Software Portal at https://it.rutgers.edu/virtual-computer-labs/knowledgebase/accessing-virtual-computer-labs/. To guarantee access to the program from your own local machine, I highly recommend that students purchase SPSS licenses for their own computers. If you choose to, you may purchase a student license for SPSS which is good for a limited period of time for a reasonable fee. NOTE: A limited term license that will allow you to download the full package of the Grad Pack Base is available at https://studentdiscounts.com/gradpackcomparison.aspx for approximately $35 for a 6-month license or ~$55 for a 12-month version. (Verified on August 22, 2020.) Here. or elsewhere, ANY version down to version #24 is fine.
    NOTE: 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 assignments, you will find an overwhelming wealth of resources on Youtube. These are, of course, free… but of uneven quality (although most are really pretty good).

4. **STRONGLY Recommended Text:** Using IBM SPSS Statistics (2nd Edition), James O. Aldrich and James B. Cunningham. Sage, 2016. ISBN: 978-1-4833-8357-6. You might want to read this in parallel with the Privitera text. It is a "light read" but is VERY helpful with SPSS and illustrates everything with abundant screenshots.

5. 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.

6. Teaching videos of course content 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 to help you prepare for case discussions ("Case Preparation") and another on "Survey Design". You will find these in the appropriate Modules of our Canvas site.

Online "Attendance": 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: Grades will consist of the following components:

	PERCENTAGE		Course Grade	CUM. PERCENTAGE
Midterm 1*	15%		A	900+
Midterm 2*	15%		B+	850-899
Midterm 3* (Final)	15%		B	800-849
CASE DISCUSSION	20%		C+	750-799
Quizzes*	15%		C	700-749
Project	20%			
TOTAL GRADE	100%			

Legend: * all Exams and Quizzes will be open-notes and open-book; also STRICTLY timed

Note Regarding Grading on Case Discussion: This course depends heavily on class participation, primarily through case discussion. So, it 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. This counts for 20% of your grade and will be evaluated on an ongoing basis throughout the semester. 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 interaction by doing the required reading according to the guidance provided in the "Case Preparation" video.

Almost EVERY Module will include a **Quiz** on the assigned reading for the day. Your lowest TWO quizzes during the semester will be dropped. Under no circumstances will a "Quiz" opportunity be extended.

A **Project** will be assigned before the first Exam for the course. For this semester-long Project, you will select one or two classmates to form a two or three-person "Project Team". Then, you and your colleague(s) will be responsible to design and submit a recorded 20-30 minute video presentation of a Case or Topic. Your primary consideration in designing your presentation is that your work on the team must be COLLABORATIVE. That is, it cannot merely be a "tag-team" linear presentation of a number of sequential individual presentations. More on this will be detailed in the Canvas Assignment.

In addition, three **Exams** will be administered. They will be based on the course readings, videos, and case discussions. Each Exam will be open-notes and open-book. They will also be STRICTLY-timed with the times determined according to the times of students who have achieved "B" grades in the past.

HR Analytics Spring 2021 Schedule

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	**Intro to each other and the Course**			Bersin on People Analytics 2016 (12 pp.)
	Review of Descriptive Statistics		V#1 Descriptive Stats Self Test	Deloitte 2017 Global Human Capital Trends (People Analytics section only, 12 pp.)
Module #2	Review of Tests of Group Differences: The T-Test Review of Tests of Group Differences: ANOVA		V#2 T-Test Tutorial V#3 ANOVA Tutorial w/SPSS	
Module #3	Review of Tests of Association: Correlations Review of Tests of Association: Regressions		V#4 Correlation Video Stats V#5 Regression Video	
Module #4	DDL Case Discussion (Chapts. 1-2)	**DDL** Preface and Chapter 1: Playing the Blame Game (pp. xv-24) **DDL** Chapter 2: Leading with Business Outcomes (pp. 25-48)	Vid on Case Preparation	Does Engagement Really Drive Results (2 pp.) 51 HR Metrics (4 pp.)
Module #5	EXAM #1 Lecture & Discussion PHRA Chapt. #1	**PHRA** Chapter 1: Understanding HR Analytics (pp. 1-9)		
Module #6	Lecture & Discussion PHRA Chapt. #2	**PHRA** Chapter 2: HR Information Systems and Data (pp. 10-56)		The Bias Undermining Your People Analytics HBR Dattner (5 pp.) The Complications of Conducting Research (28 pp.)
Module #7	Lecture & Discussion PHRA Chapt. #3	**PHRA** Chapter 3: Analysis Srategies (pp. 57-107)		HBR Competing on Talent Analytics (14 pp.)
Module #8	DDL Case Discussion (Chapt. #3)	**DDL** Chapter 3: Starting with Analytics (pp. 49-82)		Six Dangerous Myths About Pay HBR Pfeffer (25 pp.) Does Firm Status Confer a Recruiting Advantage (Chapter 2; 26 pp.)
Module #9	DDL Case Discussion (Chapts. #4-5)	**DDL** Chapter 4: Early Discoveries (pp. 83-110) **DDL** Chapter 5: Diagnosing What's Wrong (pp. 111-147)		

Module #10	DDL Case Discussion (Chapts. #6-7)	**DDL** Chapter 6: The Road Ahead (pp. 147- 174); Chapter 7: Results Win Support (pp. 175-198)		Who to Promote: 10 Keys to Identifying People with High Potential (4 pp.); Looking for a lesson in Google's perks (5 pp.); Becoming Irresistable: A New Model for Employee Engagement (18 pp.)
Module #11	Survey Design Lecture/Discussion; Exercise/Quiz **Exam #2**		Vid on Survey Design	Survey Tips Booklet Skills Not Schools: The Role of Educational Background (26 pp.)
Module #12	Lecture & Discussion PHRA Chapt. #5 Lecture & Discussion PHRA Chapt. #6 **PRIMARY CASE TO BE DISCUSSED**	**PHRA** Chapter 5: Case Study #2 Employee Attitude Surveys- Engagement & Workforce Perceptions (pp. 144-189) **PHRA** Chapter 6: Case Study #3 Predicting Employee Turnover (pp. 190-236)		
Module #13	Lecture & Discussion PHRA Chapt. #7 Lecture & Discussion PHRA Chapt. #8 **PRIMARY CASE TO BE DISCUSSED**	**PHRA** Chapter 7: Case Study #4 Predicting Employee Performance (pp. 237-284) **PHRA** Chapter 8: Case Study #5 Recruitment and Selection Analytics (pp. 285-318)		
Module #14	**Team Presentations**	**PHRA Chapter 4**: Case Study #1 Diversity Analytics (pp. 108-144); **Chapter 9**: Case Study #6 Monitoring the Impact of Interventions (pp. 319-364); **Chapter 10**: Business Applications: Scenario Modelling & Business Cases (pp. 365-411); **Chapter 12**: Reflection on HR Analytics: Usage, Ethics, and Limitations (pp. 437-452)		