



**Georgetown University  
School of Continuing Studies  
Master of Professional Studies in Human Resources Management  
Course Syllabus, Fall 2014**

<b>Course:</b>	Human Capital Analytics (MPHR-725-01)
<b>Class time:</b>	Monday, 5:20 p.m. – 7:50 p.m.
<b>Location:</b>	640 Mass Ave – C226
<b>Instructor:</b>	Eric P. Olesen
<b>Office:</b>	Georgetown University 3307 M Street, NW Washington, DC 20057
<b>Office Hours:</b>	By Appointment
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## **Course Description**

Leading companies are using Human Capital Analytics for workforce reporting and to help make better, more informed decisions about their human capital. There is a continuum of the value that analytics bring to an organization: basic data reporting, benchmarking and advanced reporting, survey analytics and predictive analytics. Organizations are looking for a Human Resource professional who can improve their impact on the business by using the latest analytical tools and techniques.

In this course we will focus on developing a foundation in statistical techniques and data management using IBM-SPSS. We will explore workforce reporting and the analytics

traditionally used to improve decision-making. We will also introduce advanced analytical tools and techniques, such as predictive modeling, which is making it possible for organizations to glimpse into the future and make informed predictions.

## Required Textbooks

Field, Andy (2013), ***Discovering Statistics Using SPSS (Fourth Edition)***, Sage Publications Ltd. ISBN-13 978-1-4462-4916-8

American Psychological Association (2009), ***Publication Manual of the American Psychological Association*** (6<sup>th</sup> Edition), American Psychological Association  
ISBN- 1433805618

## Recommended Reading

Aamodt, M.G., Surrette, M.A., Cohen, D (2007), ***Understanding Statistics: A guide for I/O Psychologist and Human Resources Professionals***. Wadsworth Cengage Learning  
ISBN-13: 978-0-495-18663-2

These articles help you apply the concepts from *Understanding Statistics: A guide for I/O Psychologists and Human Resources Professionals*.

Buttigieg, S. (2005). Gender and race differences in scores on the Employee Aptitude Survey: Test 5 Space Visualization. *Applied H.R.M. Research*, 10(1), 45-46.

Kethey, R.B., & Terpstra, D. E. (2005). An analysis of litigation associated with the use of the application form in the selection process. *Public Personnel Management*, 34(4), 357-375.

Roberts, G.E. (2004). Municipal government benefits practices and personnel outcomes: Results from a national survey. *Public Personnel Management*, 33(1), 1-19.

Selden, S.C. (2005). Human resource management on American counties, 2002. *Public Personnel Management*, 34(1), 59-84.

Barclay, L. A. & York, K.M. (2003). Clear logic and fuzzy guidance: A policy capturing study of merit raise decisions. *Public Personnel Management*, 32(2), 287-299.

Levine, S.P. & Feldman, R.S. (2002). Women and men's nonverbal behaviors and self-monitoring in job interview setting. *Applied H.R.M. Research*, 7(1), 1-14.

Roberts, L.L., Konczak, L.J., & Macan, T.H. (2004). Effects of data collection methods on organizational climate survey results. *Applied H.R.M. Research*, 9(1), 13-26.

Lee, J.A., Havighurst, L.C., & Rassel, G. (2004). Factors related to court references to personnel appraisal fairness and validity. *Public Personnel Management*, 23(1), 61-69.

- Cole, M.S., Field, H.S., & Giles, W.F. (2003). What can we uncover about the applicants based on their resumes? A field study. *Applied H.R.M. Research*, 8(2), 51-62.
- Gilbert, J.A. (2000). An empirical examination of resources in a diverse environment. *Public Personnel Management*, 29(2), 175-184.
- O'Connell, M.S., Doverspike, D., Cober, A.B., & Phillips, J.L. (2001). Forging work teams: Effects of the distribution of cognitive ability on team performance. *Applied H.R.M. research*, 6(2), 115-128.
- Smith, W.J., Harrington, K.V., & Houghton, J.D. (2000). Predictors of performance appraisal discomfort: A preliminary examination. *Public Personnel Management*, 29(1), 21-32.
- Befort, N. & Hattrup, K. (2003). Valuing task and contextual performance: Experience, job roles, and ratings of the importance of job behaviors. *Applied H.R.M. Research*, 8(1), 17-32.
- Huang, I, Chuang, C.J., & Lin, H. (2003). The role of burnout in the relationship between perceptions of organizational politics and turnover intentions. *Public Personnel Management*, 32(4), 519-530.
- Raynes, B.L. (2001). Predicting difficult employees: The relationship between vocational interests, self-esteem, and problem communication styles. *Applied H.R.M. Research*, 6(1) 33-66.
- Roberts, G.E. (2003). Municipal government part-time employee benefits practices. *Public Personnel Management*, 32(3), 435-454.
- Conte, J. M., Ringenbach, K.L., Moran, S.K., & Landy, F.J. (2001). Criterion-validity evidence for time urgency: Associations with burnout, organizational commitment, and job involvement in travel agents. *Applied H.R.M. Research*, 6(2), 129-134.
- Franz, T.M. & Norton, S. D. (2001). Investigating business casual dress policies: Questionnaire development and exploratory research. *Applied H.R.M. Research*, 6(2), 79-94.
- Raynes, B.L. (2001), Predicting difficult employees: The relationship between vocational interests, self-esteem, and problem communication styles. *Applied H.R.M. Research*, 6(1), 33-66.

## IBM-SPSS Software

Students will need to use IBM - SPSS as part of this course. Students, who are not currently familiar with IBM-SPSS, are advised to begin familiarizing themselves with it in advance of the course. You have access to IBM - SPSS in the Georgetown Computer Labs and our classroom. There is a student version of the software available for download/purchase. **IBM SPSS Statistics Standard Grad Pack** is available to students for around \$60.00 for a 6 month version if you would like to have it on your PC.

## Course Objectives

Upon completion of this course, the student will be able to:

- Identify appropriate data and metrics for HR problem-solving and decision-making
- Understand how to measure and interpret patterns in data
- Use SPSS to analyze and interpret HR data
- Apply statistical analysis to HR questions and problems to improve decision-making
- Effectively interpret and communicate results from SPSS output

## Lectures and Class Participation

Students should come to lecture prepared to synthesize material from the readings with experiences and examples from HR. The purpose of the lectures is to solidify concepts from the reading via in-class examples and applications using IBM-SPSS. I am always looking for ways to highlight the saliency of statistics in HR decision-making; I encourage students to contribute to the class by offering their own relevant experiences as HR professionals. Students should come to the lecture having completed the required reading, which is specified in the course outline. The pre-lecture preparation will serve to enhance everyone's learning.

## Assessment and Grading Policies

Assessment is on a continuous basis to assure that learning is taking place. The final grade is cumulative of the student's progress during the semester, based on the following scheme:

<b>Mid Term Exam</b>	<b>40%</b>
<b>Final Exam</b>	<b>60%</b>

### **A = 95-100%**

Clearly stands out as excellent work. An "A" grade work could be used as a model for other students to emulate. Shows excellent grasp of subject matter and conceptual integration. The presentation shows excellent in-depth analytical thinking and an elegantly innovative application. It is very well written and organized. Additional input is provided, relevant to the subject, from outside sources or personal experience.

### **A- = 90-94%**

Represents high quality performance. Shows excellent grasp of subject matter and conceptual integration. Shows a high level of thinking, analysis and application. The presentation is very well written and organized. Additional input is provided, relevant to the subject, from outside sources or personal experience.

### **B+ = 87-89%**

Represents very good work. Shows thorough grasp of subject matter and effective application. Shows good thinking and analysis. The presentation is well written and organized. Additional input is provided, relevant to the subject, from outside sources or personal experience.

**B = 83-86 %**

Represents satisfactory work. Shows adequate level of thinking and analysis. Standard of presentation, organization and appropriateness of application is adequate. Some level of additional input is provided.

**B- = 80-82 %**

Work is below graduate level expectations, marginally passing. Presentation is rather general, superficial, or incomplete and not very well written. Indicates minimal level of individual thought or effort with inadequate attempts at application.

**C = 70-79%**

Work is clearly unsatisfactory. It is poorly written and presented, shows poor analysis, misses important elements and lacks any noticeable attempts at application.

**F = 69% and below**

Fails to meet minimum acceptable standards.

**Suggested Practice Problems**

Practice problems will be assigned for each chapter – the practice problems will not be graded. You are expected to use IBM-SPSS to complete the practice problems as a study guide to supplement the lectures and in-class quizzes.

**Assignment Objectives**

Though each chapter in your textbook comes with objectives, I have objectives that I have for each class that I focus on. There is much more material contained in your textbook than you will need to know for the exams. Therefore, you should pay attention to these objectives so you have an idea what you need to know from each chapter.

**Quizzes**

Pop quizzes will be given during class time. The quizzes will be used to assess your understanding and preparing for the class. *Quizzes will take no more than 20 minutes.* Quizzes will not be graded and will be reviewed in class after they are completed

**Mid-Term**

The Mid-term exam will cover Chapters 1-6, as well as information from class discussion; the format will be multiple choice and short answer using IBM- SPSS. You will have 1.5 hours to complete the exam.

**Final Exam**

The Final exam will be cumulative (covering all topics from class lectures) and information from class discussion; the format will be, multiple choice and short answer using IBM- SPSS. You will have 2.5 hours to complete the exam.

## **Policies & Procedures**

### **Attendance**

**Students are expected at all meetings of the course. The SCS attendance policy is strictly adhered to.** We do understand that from time to time, family, personal and or work emergencies may arise. In those circumstances, please contact your professor immediately. A student who misses more than two classes is subject to withdrawal from the class by Dean Metzler and a final grade of "F" in the course. Late arrivals of more than ten minutes after the start of class will count as one absence. Two late arrivals will count as two missed classes, and, will result in withdrawal from the class by Dean Metzler and a final grade of "F" in the course.

### **Academic Honesty**

It is expected that all materials submitted as part of any class exercise and/or course requirement, in and out of class, is the actual work of the student whose name appears on the material. In addition, no assistance is to be obtained from commercial organizations that sell or lease research help or written papers.

Plagiarism or submitting the work of another student as if it were your own will also result in an "F" grade for the course.

### **Cheating**

Any student who cheats during an examination or who assists another student in cheating on an examination will automatically fail the course.

### **Course Withdrawal**

You may drop this course anytime up to the university drop date deadline.

### **Make-up Exams and Incompletes**

No make-up exams or projects will be given. There will be no change of grade. Incomplete grades will be given under the following conditions: documented sickness by a Medical Doctor and documented emergencies.

### **Service With Disabilities Policies**

Students with documented disabilities have the right to specific accommodations that do not fundamentally alter the nature of the course. Some accommodations might include note takers, books on tape, extended time on assignments, and interpreter services among others. Students must obtain an official letter from the Academic Resource Center listing the exact accommodations needed.

Students with disabilities should contact the Academic Resource Center (ARC) (Leavey Center, Suite 335; 202-687-8354; [arc@georgetown.edu](mailto:arc@georgetown.edu); <http://ldss.georgetown.edu/index.cfm> ) before the start of classes to allow their office time to review the documentation and make recommendations for appropriate accommodations. If accommodations are recommended, you will be given a letter from ARC to share with your professors. You are personally responsible for completing this process officially and in a timely manner. Neither accommodations nor exceptions to policies can be permitted to students who have not completed this process in advance.

## **Honor System**

All students are expected to follow Georgetown's honor code unconditionally. If you have not done so, please read the honor code material located online at:

<http://gervaseprograms.georgetown.edu/honor/system/> . Faculty members are required to address potential violations of the honor code.

### ***The Honor Pledge***

*In pursuit of the high ideals and rigorous standards of academic life I commit myself to respect and to uphold the Georgetown University honor system; To live out a commitment to integrity in all my words and actions; To be honest in every academic endeavor; And to conduct myself honorably, as a responsible member of the Georgetown community as we live and work together. To live out the ideals of Georgetown University, I commit myself to be a person for others in my daily life, respectful of difference and disagreement; To care for this venerable campus and all of those with whom I share it; And to fulfill in all ways the trust placed in me to carry on the Georgetown tradition.*

## Course Outline – August 27, 2014 – December 5, 2014

Date	Topic	Reading	Suggested Practice Problems
27 Aug	Introduction and the Role of Data in HR		
1 Sept	<b>University Holiday/ No Class</b>		
8 Sept	The Concept of Statistical Analysis	Field:Ch1	Page 39: Task1-4, 9
15 Sept	Statistical Models	Field:Ch2 Aamodt: Ch1/Ch2	Page 87: Task 2,5,6,8
22 Sept	SPSS and Data Visualization	Field:Ch3/Ch4	Page 162: Task 1,5,9
29 Sept	Exploring Assumptions	Field: Ch5	Page 211: Task 1,3,8
6 Oct	Correlation	Field: Ch7 Aamodt: Ch4	Page 291:Task 1,10
13 Oct	<b>University Holiday/ No Class</b>		
20 Oct	<b>Midterm Exam</b>		
27 Oct	Simple Regression	Field: Ch8	Page 354: Task 1
3 Nov	Multiple Regression	Field: Ch8	Page 354: Task 4
10 Nov	Logistic Regression	Field: Ch19	Page 812: Task 3,5
17 Nov	Comparing Two Means	Field: Ch9 Aamodt: Ch3	Page 390: Task 1,5
24 Nov	Comparing Several Means	Field: Ch11 Aamodt: Ch3	Page 476: Task 3
1 Dec	Final Review		
Final Date TBD – December 11 – 19	<b>Final Exam</b>		