HR Decision-Making: Data-Based Decisions (Spring 2016)
38:533:542

Instructor: Ralph A. Rodriguez, Ph.D., SPHR
Office: 215D Janice H. Levin
Office Hours: Mon., Tues., & Thurs. 2:30 – 4:00 PM; and by appointment
Email: ralpharodriquezphdsphr@gmail.com
Telephone: (973) 500-8789

COURSE OVERVIEW:

Course Description: This course is an applied course, designed to provide students an introduction to statistical techniques used to make data-based decisions. The context is human resource management, but the applications are also relevant to other business and management decisions. An emphasis is on fostering (a) a conceptual understanding of different statistical techniques so the student will know which statistical analysis is appropriate for answering a particular applied question (e.g., which training program led to higher productivity?) and (b) a practical set of skills so the student can carry out the analysis and make the correct decision.

The emphasis in this course is on developing a basic understanding of statistics commonly used in human resource management, knowing how to calculate various statistics (whether by calculator or using SPSS), and most importantly, how to interpret results.

SMLR Learning Goals: Data-Based Decisions is designed to meet sections of two SMLR Learning Goals:

II) Quantitative Skills – Apply appropriate quantitative and qualitative methods for research on 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)

VI) Application – Demonstrate an understanding of how to apply knowledge necessary for effective work performance
   o Apply concepts and substantive institutional knowledge, to understanding contemporary developments related to work
   o Understand the internal and external alignment and measurement of human resource practices (HRM)

COURSE OBJECTIVES:

My Goals in Teaching This Course:
1. To develop the ability of students to reason analytically and critically.
2. To provide an understanding of basic business research methods and develop the ability of students to be conversant regarding business research decisions.
3. To provide the necessary tools for evaluating and understanding business research.
4. To provide the necessary tools for planning and designing business research.
5. To develop the ability of students to communicate original research and critiques of existing research clearly and incisively through oral presentation and writing.
6. To increase students’ comfort and facility with statistical methods and the use of technology as a research and communication tool.
My Goals for YOU: Upon completion of this course students will understand:
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 and causality.
5. The interpretation of statistics commonly used by human resource professionals.
7. Explaining analysis outputs both orally and in writing.

In addition, the student will develop a 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.

TEXTS:


This course makes use of SPSS for calculations. SPSS is installed on the computers that will be used by students during classes and exams. SPSS is also available on computers in all RU computer labs. I highly recommend students purchase SPSS licenses for their own computers. If students wish they can purchase a license for SPSS which is good through June 30, 2016. SPSS will work on Win, Mac, and Linux machines. To purchase go to http://oit.rutgers.edu/ and click on “Software Portal.” Log in with your NetID. On the right-hand part of the screen you will see a list of “Featured Publishers.” Click on “IBM/SPSS” and choose the software you want to license. The license fee is $100.

In the past, students have found alternative student-friendly sites to download SPSS at a lower cost. Students in the past have also found sharing a license or computer to reduce the cost of the software. If you find an alternative for downloading the software, I recommend you send a link to me so that I can review and ensure it will meet the requirements of the course. Sometimes trial or student versions of software expires before the semester ends, or it limits the number of cases or variables you can analyze in one dataset. If the software is limited it may affect your experience in this course.

ASSIGNMENT EXPECTATIONS

The format of this course will be lecture and discussion. It will be highly interactive. Much of the communication will take place electronically on the course Sakai site. You are expected to have completed your reading assignments prior to class, and should come prepared to discuss the material. Students will be responsible for all the assigned material. YOU are responsible for securing all notes from missed classes. University, College and Departmental policies will be observed in this course.

Assignments are due as indicated. I will try to adhere to the enclosed time-line. You must type all written work. Check for grammar & spelling errors. Errors will be penalized. Always keep a backup copy. No INDIVIDUAL extra credit assignments will be given.

Attendance: Classroom attendance is essential and mandatory. Attendance and preparation are the keys to the type of Socratic approach that will be used in this course. Since every class member is critical to our collective learning process, missing class will have negative repercussions on your own learning and that of your classmates. Therefore, attendance at every class is required. Absences for illness, religious holidays and other events recognized by Rutgers University will be excused. If you know you are going to miss a class because of a religious holiday, I would appreciate an email prior to the holiday. I know that employer demands sometimes require even the most conscientious student to miss a class. I am much more sympathetic to a rationale for an absence emailed to me before the absence than an excuse made after the fact, so if you know you will be missing a class please email me in advance. Even excused absences are not valid reasons for work not to be done.
**Class Contribution:** This is a course citizenship grade and will reward you for preparing for, participating in, and enriching the learning experience. It will be based on both frequency and quality of class participation, with quality weighted more heavily than frequency. Valued behaviors include: initiating discussions, voicing original ideas, challenging others, defending your own views, raising important and relevant points, attempting to answer unpopular questions, and generally demonstrating a command of assigned reading materials. Behaviors to avoid include: reiterating obvious points, making irrelevant remarks, distracting the class, and failing to participate when asked. **SPECIAL NOTE:** ANY electronic disturbances (cell phones, beepers, watches, etc.) during class will result in a 1-point reduction in your grade (per incident).

**Sakai Communication Contribution/Participation:** This grade will assess the QUALITY of your comments on the DISCUSSION THREADS on topics that will periodically be posted on the course Sakai site. (See above, in the CLASS CONTRIBUTION section, for information on what communication behaviors will be valued. Generally, these will be thoughtful and thought-provoking comments, supported by logical precision and/or creative organization of ideas.) Comments that reflect evidence of a command/mastery of assigned material will be particularly rewarded. Students will be expected to make at least **THREE quality contributions during the semester.** You will also want to read the contents of every discussion board because the posted material will be included in Exams. **NOTE:** Sakai comments that meet the “quality” hurdle, as discussed above, are typically anywhere from **500-750 words long.** For grading purposes, these assignments will be “batch-processed” during the final week of each month.

**Examinations:** There will be two examinations as noted on the course schedule. They will include material from the text, classroom discussions, the SPSS workbook/text, and the Sakai Discussion Board threads. Each examination will be worth 25% of the course grade. They will be split 50-50 between fact-based “objective” questions and application-based short answer and essay questions.

Make-up policy: An examination grade of “0” will be assigned to any student who is absent without a legitimate excuse on the date of a regularly scheduled test. Legitimate excuses include illness (verified by a note from a doctor), inclement weather (only when the Rutgers Information Service (848-932.INFO) indicates that Rutgers is closed), scheduled religious holidays, business trips or events where attendance is required by an employer, when the instructor emails the class announcing class is suspended, or other dire circumstances such as a death in the family.

**Students with learning disabilities or other reasons for taking the examination outside the regular examination time should present a statement to that effect with appropriate documentation as early in the semester as possible, but certainly prior to the first midterm examination.**

A makeup exam will be held at a time convenient to the instructor when all students needing to take the makeup can be present. An examination cancelled by the instructor will be held at the next regularly scheduled class period.

**Exercises:** Assigned exercises are to be done out of class and turned in via the Assignments tab on Sakai on the date indicated on the syllabus. All exercises are worth the same number of points, with the total exercise grade composing 10% of the overall grade. The exercises will be posted on Sakai a week before they are due. Exercises not turned in on the due date and without a valid excuse (Legitimate excuses include illness (verified by a note from a doctor), inclement weather (only when the Rutgers Information Service (848-932.INFO) indicates that Rutgers is closed), scheduled religious holidays, or when the instructor emails the class announcing class is suspended or other dire circumstances (such as a death in the family) will receive no points. Business trips and office functions are not a valid reason for not turning exercises in on time. Exercises are due submitted to Sakai by the beginning of the class the day they are due. All exercises must be submitted to the assignments tab on Sakai; paper exercises will not be accepted and will not be graded.

**CRITIQUES OF GROUP PAPERS:** While most of the Exercises are not time-intensive, one that will involves critically evaluating another team’s project before it is finalized. In this assignment, you are to critically evaluate (separately) two group papers (first drafts). Your primary job is to HELP the authors by offering constructive feedback on their paper. That is, offer suggestions on how to make the paper better. Also, comment on what you like about the paper. You are to write as if you are the final reviewer before the research is presented for an Executive Team. You will be graded for the number of issues you recognize, your suggestions for improvements, and TONE. (For the sake of grading, YOUR critique will be compared to the critique that I also perform on each group’s draft. Your critique, and mine, will then be made available to the research group for subsequent revision of its paper... commonly referred to as the “Revise and Resubmit” process.) **A paper that adequately addresses the relevant issues is expected to be 3-6 pages in length, double-spaced.**
Quizzes: Five to seven “pop quizzes” will be administered during the semester. They will be short (10-minute), objective quizzes, based on that day’s reading(s). They will be given at the VERY beginning of class. **No make-ups will be permitted** but the ONE lowest (or MISSING) grade will be dropped.

GROUP PROJECT: Students will be assigned to project teams. These teams will exist for the entire semester and will have two primary responsibilities, a research paper and a presentation.

RESEARCH PAPER AND PRESENTATION: Each team will be responsible for preparing a paper and presentation on a BUSINESS-RELATED research topic to be decided and submitted for approval by the beginning of class on October 3rd. The research must be thoroughly original and include the construction of a valid/reliable survey instrument. Your work will be submitted in stages, with the fully edited version due on the date of the FINAL. Your classroom presentation of the research project will be limited to 20 minutes. In that time, you will be expected to EFFICIENTLY present your topic, a summary literature review, your model, the methodology used, the results of your analysis, your conclusions, and the theoretical and/or practical importance/implications/limitations of your findings. Groups are free to determine the most effective format for their presentations, remembering that it is difficult to discuss theoretical models and statistics without graphical representations.

**NOTE ON THE PAPER:** Papers must conform to the citation and referencing style described in the APA Publication Manual (available in the library). There are several websites that provide APA guidelines and examples, including: [www.psycinfo.com/resource/apaclip.htm](http://www.psycinfo.com/resource/apaclip.htm) and [http://webster.comment.edu/apa/apa_index.htm](http://webster.comment.edu/apa/apa_index.htm).

**GUIDELINES:** A “good” quality paper is expected to have at least 10 references and to be 15-25 pages in length (given, of course, that it is appropriate for the scope of the paper).

**SUGGESTIONS ON HOW TO GET A TOPIC:** Papers that perform REAL research for REAL organizations will be eligible for extra credit, based on the quality of the research and recommendations. Ideally, you can use this opportunity to network your way into a profit-making or non-profit organization by providing research assistance that helps them solve a REAL current business problem. These may include issues of employee satisfaction, engagement, department or organizational effectiveness, etc. Remember that your project requires your conclusions to be based upon a survey instrument that YOU have created. You will have to volunteer your services to organizations to determine how to meet your joint interests. **NOTE:** For organizations, think broadly. They may be schools, religious organizations, campus organizations, small or large businesses, support (landscaping, maintenance, etc.) or educational (Management, Economics, etc.) departments within Rutgers University, etc. Most of these organizations will want to be assured that your project is being done under the supervision of a faculty member. You may give them your name and contact information. You might be able to get some other research ideas by consulting with the friendly people at “Community Service at Rutgers” (from their website: “Community Service at Rutgers is part of the Office of Student Involvement & Community Service within the department of Student Life. In our office, you will find advisors dedicated to community service programs, the Student Volunteer Council headquarters, and many resources for your volunteer needs.”). They are the university’s link to community (mostly non-profit) opportunities.

**Grading:** Grades will consist of the following components and weighted as indicated:
- Class and Sakai Contribution 10%
- Exam 1 (Midterm) 25%
- Exam 2 (Final) 25%
- Exercises 10%
- Quizzes 10%
- Group Project 20%

**MISCELLANEOUS COURSE POLICIES:** The following class rules will be strictly enforced. Do not ask for exceptions.

**Classroom Conduct:** Otherwise polite students sometimes behave in an uncivil manner when taking courses. The following are NOT permitted in class:

(a) cell phones, pagers, and text messaging devices. These should be turned off and put away OUT OF SIGHT.
(b) laptop computers except when used for taking notes or working in SPSS. **Web surfing or reading emails or other non-course-related computer or other electronic device use will result in the student being made to leave the class; repeated offenses will result in suspension from the class.**
(c) napping
(d) chit-chatting with your seat neighbors
(e) reading the newspaper (includes working puzzles contained therein)
(f) studying or doing homework for other courses
(g) arriving at class late on a consistent basis
(h) leaving class early on a consistent basis
(i) wandering in and out of class

When you are doing any of these things it is hard to argue you are participating in the class, and points will be deducted from your Participation score.
**TIMELINESS AND Formatting OF ASSIGNMENTS:** Assignments are due by the beginning of class on their due dates.

**Academic Integrity:** The rights of students will be protected to ensure that test scores are related to competence in the subject matter. Therefore, all examinations will be carefully proctored. If cheating is detected, it will be prosecuted to the limit allowed by University policies. An academic integrity contract will be distributed in class. Students must submit a signed copy of the contract before the second class they attend. ASSIGNMENTS AND EXAMS TURNED IN BEFORE THE ACADEMIC INTEGRITY CONTRACT IS HANDED IN WILL RECEIVE A GRADE OF “0.”

In addition, electronic comparison will be used to detect plagiarism, which will result in AUTOMATIC FAILURE and reported to the Dean. 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 syllabus is subject to change based on my on-going assessment of student needs and progress.*
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Williams &amp; Monge</th>
<th>Aldrich &amp; Cunningham</th>
<th>Due for Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 21</td>
<td>Presentation of the Syllabus</td>
<td>Chapters 1-2</td>
<td>Chapters 1-3 Introduction to SPSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intro to Social Science Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan. 28</td>
<td>Statistics and Research</td>
<td></td>
<td>Appendix B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GROUP MEETINGS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb. 4</td>
<td>Levels of Measurement</td>
<td>Chapter 3</td>
<td>Chapters 4-6 Measurement and Data</td>
<td>Exercise 1: Review of Published Paper Due</td>
</tr>
<tr>
<td>Feb. 11</td>
<td>Interpreting Existing Research</td>
<td>Chapter 4</td>
<td>Chapter 11 Basic Descriptive Statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Describing Distributions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb. 18</td>
<td>Predicting Parameters</td>
<td>Chapter 5</td>
<td></td>
<td>Submit MODEL and HYPOTHESES</td>
</tr>
<tr>
<td></td>
<td>Questionnaire Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb. 25</td>
<td>Survey Research &amp; Analysis</td>
<td>Chapter 14</td>
<td>Chapter 23 Factor Analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Factor Analysis</td>
<td>Re-read Appendix B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 3</td>
<td>Discriminant Analysis</td>
<td>Chapter 15</td>
<td></td>
<td>Submit MODEL and HYPOTHESES</td>
</tr>
<tr>
<td></td>
<td>Testing Hypotheses</td>
<td>Chapter 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 10</td>
<td>EXAM #1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group Meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 17</td>
<td>SPRING BREAK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 24</td>
<td>The t Test</td>
<td>Chapter 7</td>
<td>Chapter 12-15 t-Tests and ANOVA</td>
<td>Submit Factor &amp; Discriminant Analysis of Survey (n&gt;100 or at least half of population)</td>
</tr>
<tr>
<td></td>
<td>Single-Factor ANOVA</td>
<td>Chapter 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 31</td>
<td>Correlations</td>
<td>Chapter 11</td>
<td>Chapter 19-22 Correlation &amp; Regression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regression</td>
<td>Chapter 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr. 7</td>
<td>Group Meetings</td>
<td>Chapter 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multiple Regression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr. 14</td>
<td>Group Meetings</td>
<td>Chapter 10</td>
<td></td>
<td>First Drafts of GROUP Papers Due (Submit 10 copies.)</td>
</tr>
<tr>
<td></td>
<td>Nonparametric Tests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr. 21</td>
<td>Time Series Analysis</td>
<td>Chapter 16</td>
<td></td>
<td>Individual Reviews of GROUP Papers Due</td>
</tr>
<tr>
<td></td>
<td>Review for Exam #2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------</td>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr. 28</td>
<td>Exam #2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group Meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 5</td>
<td>FINAL EXAM: Presentation of Group Projects</td>
<td>Presentations and Final Drafts Due At Time of University-Scheduled Final</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>