The University of Oklahoma College of Continuing Education Advanced Programs – Course Syllabus

Course Title:

Research in Human Relations

Course Number:

HR 5023-225

Course Description:

The course is designed to provide basic skills in statistics, data analysis, and the principles of experimental design useful in the evaluation of human relations research. Emphasis will be placed on understanding and interpreting statistical techniques. Measurement issues impacting on the interpretation and analysis of data in the social sciences also will be discussed. A substantial amount of class time will be devoted to data analysis (using a calculator) and the discussion of principles relevant to the design of research studies.

Class Dates, Location and Hours:

Dates: October 25-30, 2016

Location: Naples, Italy. See Site Director for classroom site.

Hours: Tuesday - Friday 6:00-9:30 pm; Saturday and Sunday 8:30 a.m.-4:30 p.m.

Last day to enroll or drop without penalty: September 26, 2016

Site Director:

Email: apnaples@ou.edu; Phone: 39-081-568-6672; DSN 626-6672

Professor Contact Information:

Course Professor: Jorge L. Mendoza, Ph.D. Mailing Address: University of Oklahoma

Psychology Dept. DAHT #729

Norman, OK 73019

Telephone Number: (405) 325-4511 Email Address: jmendoza@ou.edu

Website Address: http://www.faculty-staff/M/Jorge.L.Mendoza-1

Professor availability: The professor will be available via e-mail to students before and after the

class sessions. On-site office hours are half an hour before and after each

class session, by appointment.

Textbook(s) and Instructional Materials:

Student materials are available at the OU Follett Bookstore located at 1185 Asp Avenue; Norman, OK, and can be ordered online, by phone, by email, or by fax. Ordering online at http://www.bkstr.com/oklahomastore/home is strongly recommended – students can track the status of their order within 48 hours. If an order has not been shipped within three days, students can contact the Follett textbook manager by phone (405) 325-3511, (800) 522-0772 (toll-free) or email

<u>0831mgr@fheg.follett.com</u>. Phone orders (ask for the textbook manager and identify yourself as an Advanced Programs student) can be placed 8 a.m. to 6 p.m. Monday through Thursday; 8 a.m. to 5 p.m. on Friday; 10 a.m. to 4p.m. on Saturday (CST). Summer hours: 9 a.m. to 5 p.m. Monday through Friday (CST). Fax orders can be placed 24 hours a day at (405) 325-7770. Text prices are available online.

Moore, D. (2013). *Statistics: Concepts and controversies* (8th ed.). New York: W. H. Freeman. ISBN 9781464125669.

Note: Follett is the Advanced Programs contractual textbook provider. Should text changes become necessary after publication of the course syllabus, Advanced Programs will facilitate text returns/refunds only for texts purchased through Follett.

Course Objectives:

The objectives of this course are to:

- understand basic statistical principles that help us make inferences from samples to populations and their probability foundation;
- learn some basic statistical procedures helpful in summarizing and analyzing data;
- examine the basic issues involved in establishing causality in research designs;
- learn to critically evaluate research projects;
- discuss issues relevant to behavioral measurements; and
- become familiar with basic statistical computations.

Assignments, Grading and Due Dates:

Pre-Class Assignments:

Before the first class meeting, the student is expected to have read the book. This is the only way that we can ensure informed discussions and effective note taking in class. As you read the material, try your hand at some of the exercises given in the book. Many answers appear in the back of the book. Do not despair if you find that some of the material is hard to understand. We will try to cover all of the chapters in the book:

- 1. Where Do Data Come From?
- 2. Samples, Good and Bad
- 3. What Do Samples Tell Us?
- 4. Sample Surveys in the Real World
- 5. Experiments, Good and Bad
- 6. Experiments in the Real World
- 7. Data Ethics
- 8. Measuring
- 9. Do the Numbers Make Sense
- 10. Graphs, Good and Bad
- 11. Displaying Distributions with Graphs
- 12. Describing Distributions with Numbers
- 13. Normal Distributions
- 14. Describing Relationships: Scatterplots and Correlation
- 15. Describing Relationships: Regression, Prediction, and Causation
- 16. The Consumer Price Index and Government Statistics
- 17. Thinking about Chance
- 18. Probability Models
- 19. Simulation
- 20. The House Edge: Expected Values
- 21. What Is a Confidence Interval?
- 22. What Is a Test of Significance?
- 23. Use and Abuse of Statistical Inference
- 24. Two-Way Tables and the Chi-Square Test

Project:

Find an empirical article (an article with data) in a professional journal that you would like to read. Read the article and write a report on how the authors used statistics to support their points. Use the OU library to find the article (don't use an article from the internet, unless it was published in a scientific journal). You may not be able to understand all of statistical procedures used in the study, but that is fine. Briefly summarize the article then comment on the design of the study, the quality of the data, how the sample was obtained, the hypotheses tested, and whether in your opinion the conclusions were supported by the

analyses. Make sure to reference the article in your report. Do not copy and paste. Write your own report. The body of the report should be 2-3 singled pages long (no including title, references, etc.).

Grade Determination:

A student's individual grade will be determined by how well he/she does on a midterm and final exams, the journal article report, and his or her contribution to the class (examination equals 70%; project 25%; class participation 5%).

Grading:

This is a letter-graded course: A, B, C, D, or F.

Notice: Failure to meet assignment due dates could result in a grade of I (Incomplete) and may adversely impact Tuition Assistance and/or Financial Aid.

POLICIES AND NOTICES

Attendance/Grade Policy

Attendance and participation in interaction, individual assignments, group exercises, simulations, role playing, etc. are valuable aspects of any course because much of the learning comes from discussions in class with other students. It is expected that you attend all classes and be on time except for excused emergencies.

Excused absences are given for professor mandated activities or legally required activities such as emergencies or military assignments. It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Unavoidable personal emergencies, including (but not limited to) serious illness; delays in getting to class because of accidents, etc.; deaths and funerals, and hazardous road conditions will be excused.

If you are obtaining financial assistance (TA, STAP, FA, VA, Scholarship, etc.) to pay all or part of your tuition cost, you must follow your funding agency/institution's policy regarding "I" (Incomplete) grades unless the timeline is longer than what the University policy allows then you must adhere to the University policy. Students who receive Financial Aid must resolve/complete any "I" (Incomplete) grades by the end of the term or he/she may be placed on "financial aid probation." If the "I" grade is not resolved/completed by the end of the following term, the student's Financial Aid may be suspended make the student ineligible for further Financial Aid.

Students are responsible for meeting the guidelines of Tuition Assistance and Veterans Assistance. See the education counselor at your local education center for a complete description of your TA or VA requirements.

Academic Integrity and Student Conduct

Academic integrity means honesty and responsibility in scholarship. Academic assignments exist to help students learn; grades exist to show how fully this goal is attained. Therefore all work and all grades should result from the student's own understanding and effort.

Academic misconduct is any act which improperly affects the evaluation of a student's academic performance or achievement. Misconduct occurs when the student either knows or reasonably should know that the act constitutes misconduct. Academic misconduct includes: cheating and using unauthorized materials on examinations and other assignments; improper collaboration, submitting the same assignment for different classes (self-plagiarism); fabrication, forgery, alteration of documents, lying, etc...in order to obtain an academic advantage; assisting others in academic misconduct; attempting to commit academic misconduct; destruction of property, hacking, etc...; intimidation and interference with integrity process; and plagiarism. All students should review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html

Students and faculty each have responsibility for maintaining an appropriate learning environment. All students should review policies regarding student conduct at http://studentconduct.ou.edu/

Accommodation Statement

The University of Oklahoma is committed to making its activities as accessible as possible. For accommodations on the basis of disability, please contact your local OU Site Director.

Course Policies

Advanced Programs policy is to order books in paperback if available. Courses, dates, and professors are subject to change. Please check with your OU Site Director. Students should retain a copy of any assignments that are mailed to the professor for the course. Advanced Programs does not provide duplicating services or office supplies.

Any and all course materials, syllabus, lessons, lectures, etc. are the property of professor teaching the course and the Board of Regents of the University of Oklahoma and are protected under applicable copyright.

For more information about Advanced Programs, visit our website at: http://www.goou.ou.edu/

INSTRUCTOR VITA

Jorge L. Mendoza, Ph.D.

Education

- 1970 BS in Psychology, University of Illinois
- 1970-1974 MS and Ph.D. in Psychology, University of Oklahoma, Norman, Oklahoma

Current Positions

- Advanced Programs Professor since 1996
- Professor of Psychology and Director of the Industrial Psychology Program, University of Oklahoma

Frequently Taught Advanced Programs Courses

- HR 5113 Organizational Behavior in Human Relations
- HR 5033 Leadership in Organizations
- HR 5023 Research in Human Relations: Major Areas of Teaching and Research Interest

Representative Publications and Presentations

- Stauffer, J.M. & Mendoza, J.L. (2001). The proper sequence for correcting correlation coefficients for range restriction and unreliability. Psychometrika, 66, No. 1, 1-6.
- Mendoza, J.L. & Stafford, K.L. (2001). Confidence intervals, power calculations, and sample size estimation for the squared multiple correlation coefficient under the fixed and random regression models. Applied Psychological Measurement, 61, 650-667.
- Mendoza, J.L., Stafford, K.L., & Stauffer, J.M. (2000). *Large-sample confidence intervals for the validity and reliability coefficients*. Psychological Methods, 5, No. 3, 356-369.
- Carraher, S.M., Mendoza, J.L., Buckley, M.R., Schoenfeldt, L.F., & Carraher, C.E. (1998). *Validation of an instrument to measure service-orientation*. Journal of Quality Management, 2 (3), 211-224.
- Schoenfeldt, L.F., & Mendoza, J.L. (1994). "Developing and using factorially derived biographical scales." In G.S. Stokes, M.D. Mumford, & W.A. Owens. (Eds). The Biodata Handbook: Theory, Research, and Applications. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Mendoza, J.L. (1993). "Fisher transformations of correlations corrected for selection and missing data." Psychometrika, 58, No. 4, 601-615.
- McBride, A.A., Mendoza, J.L., & Carraher, C.M. (1993). "The development of a biodata instrument to measure service-orientation." Proceedings of the Midwest Division of the Academy of Management. 36, 8-13.
- Schoenfeldt, L.F., & Mendoza, J.L. (1990). "The role of computer in the practice of industrial and organizational psychology." In Gutkin, T.B., & Wise, S. (Eds.). The computer as adjunct in the decision-making process. Hillsdale, NJ: Lawrence Erlbaum Associates.

Representative Honors and Awards Received

- Chair, American Psychological Association, Division 5 Membership Committee (1994)
- President (1991) Educational Statistician. (Special Interest Group of the American Educational Research Association)
- President Southern Society for Multivariate Experimental Psychology, 1977-1978
- NIMH Grant Proposal Reviewer (Committee on violence and sexual assault) 1981-1985
- APA Committee on Psychological Tests and Assessment 1985-1987
- Proposal Reviewer NIH (Small Business Grants) 1987-1988
- NIH Special Reviewer (Behavioral Medicine Study Section) 1992

Major Areas of Teaching and Research

- Psychological Measurements and Statistics (Validation, Structural Equations, Biodata, Selection Procedures)
- Organizational Behavior (Motivation, Leadership, Service Orientation)