

# The University of Oklahoma

## College of Continuing Education

### Advanced Programs – Course Syllabus

#### Course Title:

Research in Human Relations

#### Course Number:

HR 5023-110

#### 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: March 31 – April 2 & April 7 – 9 2017

Location: 3281 Sheridan Road, Fort Sill, Oklahoma.

Hours: Friday 5:30-9:00 p.m., Saturday 9:00 a.m.-5:00 p.m.; Sunday 12:00-4:00 p.m.

Last day to enroll or drop without penalty: March 2, 2017

#### Site Director:

Email: [apftsill@ou.edu](mailto:apftsill@ou.edu). Phone: 580-355-1974.

#### 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](mailto: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 [0831mgr@fhg.follett.com](mailto:0831mgr@fhg.follett.com). 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* (8<sup>th</sup> 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 making 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](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.

### **Adjustment for Pregnancy/Childbirth-Related Issues**

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see <http://www.ou.edu/content/eoo/faqs/pregnancy-faqs.html>.

## **Title IX Resources**

For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no-contact orders, scheduling adjustments, and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office at [smo@ou.edu](mailto:smo@ou.edu) or (405) 325-2215 (8-5), or the Sexual Assault Response Team at (405) 615 -0013 (24/7) to report an incident. To learn more about Title IX, please visit the Institutional Equity Office's website at <http://www.ou.edu/content/eoo.html>

## **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)