

THE UNIVERSITY OF TEXAS AT AUSTIN
Department of Educational Administration
EDA 381P: Quantitative Research Design and Analysis (08845)
Spring 2005

Dr. Terry Clark
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Class Time/Location: Monday, 7:00 to 10:00 PM, SZB 380
Office Hours: By appointment

Course Description:

This course investigates basic concepts and principles of quantitative research design and analysis. It is a graduate-level course for students who are preparing to take leadership positions in educational administration.

The objectives of the course are for students to:

- 1) Carefully read the course texts.
- 2) Become thoroughly familiar with key concepts of quantitative research design and analysis.
- 3) Acquire knowledge of the methodologies available to support quantitative research.
- 4) Make thoughtful and insightful contributions to class discussions.

Expectations for students:

- 1) Read and study the course texts.
- 2) Participate actively in class discussions and class projects.
- 3) Complete and hand in all homework on time.
- 4) Have no absences.
- 5) Come to class on time.

A student's grade will be determined based on the following criteria:

Criteria	Maximum
Classes attended	25 pts
In-class assignments	15 pts
Required readings	35 pts
Homework and/or lab work	25 pts
Total	100 pts

Grade Distribution:

A 90-100 points B 80-89 points C 70-79 points

Texts:

Trochim, W. (2001). Research Methods Knowledge Base. Atomic Dog Publishing Inc. ISBN: 1-931442-48-7 (paperback and online editions). Online course registration ID: **2813533104120**

Babbie, E., Halley, F., and Zaino, J. (2003). Adventures in Social Research: Data Analysis Using SPSS. Pine Forge Press. ISBN: 0761987584 (paperback edition (5th)).

Schedule

Class Dates	Key Topics	Assignments for next class
01/17	Holiday- no class	Not applicable
01/24	Course requirements Visit Lab Introduction	Babbie, et al.: Introductory pages and chapters 1-4 Trochim: Introductory pages and chapter 1
01/31	Preparing for social research Foundations	Babbie, et al.: Chapter 5 Trochim: Chapters 2 and 3
02/07	Using SPSS Sampling Measurement	Babbie, et al.: Chapter 6 Trochim: Chapter 4
02/14	Univariate analysis: describing your data Survey research and scaling	Babbie, et al.: Chapters 7-10 Trochim: Chapter 5
02/21	Univariate analysis (continued) Qualitative and unobtrusive measures	Trochim: Chapters 6-8
02/28	Design Experimental design Quasi-experimental design	Babbie, et al.: Chapters 11-13 CD-Appendix H: Glock, et al. CD-Appendix H: Cook, et al.
03/07	Bivariate analysis	Trochim: Chapters 9-12
03/14	No class – spring break	None
03/21	Advanced design topics Analysis topics (continued)	Babbie, et al.: Chapters 14-16
03/28	Measures of association Tests of significance Further bivariate analyses	Babbie, et al.: Chapters 17-20
04/04	Multivariate analysis Application 1 – Frequency, Cross Tabulations	Babbie, et al.: Chapters 21-22 CD-Appendix E CD-Appendix F Application 1
04/11	The research proposal Survey tips Application 2 – Analyses of Variance	No readings Application 2
04/18	Application 3 - Correlation	No readings Application 3 Analyses 1 and 2 due
04/25	Application 4 - Regression	No readings Application 4 Analysis 3 due
05/02	Results of analyses Course evaluations	No readings Analysis 4 due

Trochim:

Foundations (38 pages)

Sampling (20 pages)

Measurement (45 pages)
Survey Research and Scaling (44 pages)
Qualitative and Unobtrusive Measures (17 pages)
Design (20 pages)
Experimental Design (24 pages)
Quasi-Experimental Design (21 pages)
Advanced Design Topics (18 pages)
Analysis (23 pages)
Analysis for Research Design (35 pages)
Write-up (27 pages)
Total pages = 332
 $(332)(2) = 664$ minutes
 $664/60 = 11.07$ hours of reading
Babbie, Halley, and Zaino:
About the authors (1 page)
Tables of contents (14 pages)
Preface (7 pages)
Part I Preparing for Social Research (1 page)
Introduction (5 pages)
The Theory and Process of Social Research (9 pages)
The Logic of Measurement (10 pages)
Description of Your Data Sets (6 pages)
Using SPSS (21 pages)
Part III Univariate Analysis (2 pages)
Describing Your Data: Religiosity (43 pages)
Presenting Your Data in Graphic Form: Political Orientations (26 pages)
Exploring Attitudes Toward Abortion with Frequencies and Crosstabs (16 pages)
Creating Composite Measures: Exploring Attitudes Toward Abortion in More Depth (19 pages)
Suggestions for Further Analysis (14 pages)
Part IV Bivariate Analyses
Examining the Sources of Religiosity (24 pages)
Political Orientations as Cause and Effect (20 pages)
What Causes Different Attitudes Toward Abortion? (19 pages)
Measures of Association (52 pages)
Tests of Significance (25 pages)
Suggestions for Further Bivariate Analyses (12 pages)
Part V Multivariate Analyses (1 page)
Multiple Causation (22 pages)
Dissecting the Political Factor (17 pages)
A Powerful Prediction of Attitudes Toward Abortion (19 pages)
Suggestions for Further Multivariate Analyses (14 pages)
Part VI The Adventure Continues (1 page)
Designing and Executing Your Own Survey (19 pages)
Further Opportunities for Social Research (7 pages)
Appendices (52 pages)
Index/Glossary (10 pages)