Methods & Techniques of Inquiry I
EDP 6103 - 901
Fall 2010

Professor: Dan Sass, Ph.D.
Office: Durango 4.322
Office phone: 458-2565
E-mail: daniel.sass@utsa.edu
Office hours: Thursday, 4pm-5pm, and by appointment
Class time: Thursday, 5:30pm-8:15pm
Classroom: BV 4.304A

Required textbooks:


Optional texts:


Course Goals and Learning Targets:
1. Better understanding of design and measurement issues within School Psychology.
2. Familiarity with classic (and ongoing) debates on theory-testing as they apply to research questions of interest to School Psychologists.
3. Understand how and to what extent a study’s design and analysis plan provide a test of the veracity of the hypothesis.
4. Be able to identify the strengths and weaknesses of a design.
5. Learn general statistical vocabulary (i.e., statistics is a language), techniques, and procedures.
7. Gain an appreciation of the role statistics plays in society.
Course description:
This course covers strategies related to descriptive and experimental research, sampling procedures, and other research design concepts. This course also introduces the basic statistical topics used in behavioral research, thus students will focus on developing an understanding of the basic descriptive and inferential statistics commonly used. Statistical topics covered include: frequency distributions, measures of central tendency, variability, standardized scores, probability, correlation, and various analyses associated with reliability and validity. Students will use these concepts to read, interpret, and evaluate educational and psychological research.

Course Grading Components:

A. Homework (30 points)

There will be homework related to statistics assigned on a weekly or biweekly basis. About three quarters of the homework is computational in nature, while the other half asks you to explain or discuss an important issue that will help develop your understanding of research design or statistics. Every homework assignment is due on the following class period after it has been assigned. Whenever an explanation or definition is asked for be sure to use your own words, rather than merely re-copying the definition or answer given in the textbook or course notes. Assigned problems of this type are designed to help you develop a better understanding of the concepts presented and help prepare you for the exams.

Students will receive a check mark if the homework in completed and mostly correct (80% correct or more). Those who either do not turn in their homework or get the majority of questions incorrect will receive a zero. Late homework will NOT be accepted (i.e., assigned a zero) unless written permission is received from the instructor. The assigned homework problems are the minimum number of problems you should complete. Instead, you are encouraged to complete all the problems at the end of the chapter and those in the study guide. Statistics takes a lot of practice if you want to succeed in this class and build a good foundation for more advanced statistics and research design courses. Extra help and homework problems can also be obtained from the following link:


At the beginning of each class, there will be a brief amount of time devoted to discussing any questions you may have related to the assignment or related readings. However, if you are still having difficulties completing the exercises please schedule an appointment with the instructor.

B. Article Critique (20 points)

For three of the four research article assigned (10 points each), you should write a two page paper that evaluates the merit and quality of the study reviewed. Specifically, you should discuss the limitations associated with the methodology employed. Papers are due on the dates indicated in course outline and must be written in APA format and include a title page. Additional information associated with the article critiques will be provided. Late papers will NOT be accepted (i.e., assigned a zero) unless written permission is received from the instructor.
C. Exams (100 points)
There will be two exams, which may include material covered in lectures, assigned readings, class handouts, and homework assignments. However, nearly all the test questions come from material covered in class, so weekly attendance is extremely important. You will be allowed to bring one-sided 8.5” * 11” sheet of notes to each exam. A large proportion of the test will be multiple choice questions, but students should expect several short answer or computational problems.

D. Final Paper (50 points)
The final paper must be received (e-mailed or hand delivered) by 5pm on Wednesday, 11/24/10. This paper will consist of a thorough literature review associated with a topic of your choice and a detailed methods section that explains how you would carry out the study. You should write the introduction and methods as though you were submitting it for publication in a research journal. Therefore, it must follow APA format and be written clearly and concisely. If you have questions about your topic or research methodology you please schedule a time to meet with me. Although there is not a set page limit, it should be approximately 10 to 15 pages. Additional information regarding the research paper will be provided on Blackboard. Ten percent points will be deducted per everyday your paper is late. Papers more than three days late will NOT be accepted. All papers will be scanned for plagiarism. Any acts of plagiarism will result in a zero for the final paper (no exceptions) and students will be sent to judicial affairs for further repercussions.

Course grade:
The weights assigned to each of the course components will be:
Homework  20 points
Article Critique  30 points
Midterm Exam  50 points
Final Exam  50 points
Final paper  50 points

The final percent grade will then be converted to letter grades as follows:
A: 90%-100%
B: 80%-89%
C: 70%-79%
D: 60%-69%
F: <59%
# Tentative Course Outline

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic &amp; Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/26/10</td>
<td>Review course syllabus, introduction to research methods and statistics, &amp; designing research project</td>
</tr>
</tbody>
</table>
| 09/02/10 | Chapter 1 in MS: Introduction to Evidenced Based Inquiry  
Chapter 2 in MS: Research Designs and Reading Research Articles  
Chapter 3 in MS: Research Problems, Questions, and Hypotheses |
| 09/09/10 | Chapter 7 in MS: Descriptive Designs  
Chapters 1, 2, & 3 in GW: Descriptive Statistics |
| 09/16/10 | Chapter 4 in GW: Variability  
**Article 1 (No article critique paper is due)** |
| 09/23/10 | Chapter 9 in MS: Quantitative Data Collection Techniques  
Chapter 10 in MS: Non-experimental Research Designs |
| 09/30/10 | Chapter 16 in GW: Correlation Analyses  
**Article 2 (Article critique paper is due)** |
| 10/07/10 | Chapter 17 in GW: Regression Analyses  
Review for midterm exam |
| 10/14/10 | **MIDTERM EXAM** |
| 10/21/10 | Chapter 4 from Huck (2004): Reliability and Validity |
| 10/28/10 | Chapter 4 from Brown (2006): Factor Analysis  
**Article 3 (Article critique paper is due)** |
| 11/04/10 | Chapter 5 in MS: Designing Quantitative Research  
Chapter 6 in MS: Participants, Subjects, and Sampling for Qualitative Designs |
| 11/11/10 | Chapter 12 in MS: Understanding and Reporting Inferential Data Analyses  
**Article 4 (Article critique paper is due)** |
| 11/18/10 | Chapter 5 in GW: Z-Scores  
Chapter 6 in GW: Distributions & Probability |
| 11/25/10 | **No class: Thanksgiving** |
| 12/02/10 | Chapter 7 in GW: Probability and Samples  
Review for final exam |
| 12/09/10 | **FINAL EXAM (5:30 p.m. - 8:15 p.m.)** |

Note. This Syllabus is provided for informational purposes regarding the anticipated course content and schedule of this course. It is based upon the most recent information available on the date of its issuance and is as accurate and complete as possible. I reserve the right to make any changes I deem necessary and/or appropriate. I will make my best efforts to communicate any changes in the syllabus in a timely manner. Students are responsible for being aware of these changes.
A. Classroom behavior expectations
All members of the class are expected to behave with courtesy and respect toward others. Should behavioral disruptions interfere with the business of the classroom and the ability of class members to learn, they may be reported to the Office of Student Judicial Affairs in accordance with Section 202 of the UTSA Student Code of Conduct [http://www.utsa.edu/OSJA/index.cfm].

B. University policy on academic dishonesty
Students are expected to be above reproach in scholastic activities. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the University. "Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts" (UT Regent's Rules of Regulation). Since scholastic dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. If you have any questions please refer to the UTSA Student Code of Conduct on scholastic dishonesty and disciplinary action. This is available at: [http://www.utsa.edu/OSJA/index.cfm]

C. Academic success and the Tomás Rivera Center
The TRC provides an array of services to assist student in achieving learning success. A large proportion of beginning students find that the skills they develop in high school may not be adequate for success at the college level. The TRC provides training and assistance in such areas as study skills, test taking strategies, note taking skills, etc. The Center also has individual advising and tutoring for some courses. At the moment, tutoring is not available for this course but the various skills workshops that they run along with individual advising may prove extremely helpful. The TRC will also assist with writing and APA formatting for those who need it. The TRC is located in the University Center 1.01.02 (far west end of the UC). You can reach them via the web [www.utsa.edu/trcss] or by phone (458-4694).

D. Other student support services
Students with documented impediments and challenges may receive a variety of support services from the Office of Disability Services, and a section should be included in the syllabus to this regard:

Other student support services: UTSA students with documented disabilities have access to an array of support services through the Office of Disability Services (office: MS 2.03.18; phone: 458-4157; web: [http://www.utsa.edu/disability/]).

E. Incompletes policy
Under no circumstances will an incomplete be given after the final exam date.