

University of North Texas at Dallas

SYLLABUS

EPSY5210		(Educational Statistics) (3Hrs)		Summer 2012	
Department of	Counseling		Division of	Education and Human Services	
Instructor Name:		Dr. Ali Shaqlaih			
Office Location:		Founders' Hall, Room 227			
Office Phone:		972-338-1569			
Email Address:		ali.shaqlaih@unt.edu			
Office Hours:		TR:1:00 - 4:00 pm;			
Classroom Location:		Founders' Hall, Room 242			
Class Meeting Times:		T, R: 5:30-9:20 pm			
Course Catalog Description:		The purpose of this course is to extend your knowledge in descriptive and inferential statistical concepts and techniques commonly used in educational research. Topics include organization of data, graphical representation, measures of central tendency and variability, normal distribution curve, sampling theory and tests of significant differences between related and independent samples.			
Prerequisites		None			
Required Texts		Salkind, N. (2010). Statistics for people who (think they) hate statistics. 4 th ed. ISBN: 9781412979597. Study Tools for Salkind's book at http://www.sagepub.com/salkindstudy/			
Recommended Texts		<ul style="list-style-type: none"> • Green, S.B., & Salkind, N.J. (2011). <i>Using SPSS for windows and macintosh: Analyzing and understanding data</i>. • Lomax, R.G. (2007). <i>An introduction to statistical concepts for education and behavioral sciences</i>. Mahwah, NJ. • Frederick J Gravetter and Larry B. Wallnau (2011). <i>Essentials of Statistics for the Behavioral Sciences</i>. 7th ed. ISBN: 13:978-0-495-81220-3 			
Access to Learning Resources		UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fhg.follett.com			
Course Goals		Some of the goals of this course are to provide students the opportunity to be able to use and understand basic statistical concepts. Emphasis will be on students understanding the meaning and utility of data analysis methods and not on simply mastering calculations. The course will cover the range of methods typical of a Master's level course from basic descriptive statistics through inferential statistics such as analysis of variance (ANOVA) and regressions.			

Learning Objectives/Outcomes:

- At the end of this course, the student will be able to:
1. Develop an understanding of the role played by statistics in the overall process of research.
 2. Conduct basic descriptive and inferential statistical procedures and interpret the results.
 3. Explain and utilize hypothesis testing.
 4. Calculate and interpret confidence intervals.
 5. Use SPSS to conduct statistical procedures and interpret the output.
 6. Apply statistical concepts, scientific reasoning, and logic to social problems.

This course will utilize the following instruments to determine students' grades.

Instrument	Value	Total
Homework Assignments	five at 40 each	200
Midterm Exam	One at 200 points	200
Projects and Presentations	One at 100 points	100
Journal Article reviews	three at 50 points each	150
Attendance & Participation	Participation	50
Final Exam	One comprehensive exam	300
Total:		1000

The following standard grading scale will be used to determine your final letter grade:
 $100\% \geq A \geq 90\% > B \geq 80\% > C \geq 70\% > D \geq 60\% > F \geq 0.$

General Policies:

- The first and most fundamental expectation I have for everyone in the class is to respect one another. Among other things, this means that only one person speaks at a time, **no one works on anything not related to the class (no cell use, no texting, no reading, no sleeping,) and** everyone will put forth an honest effort.
- It is the student's responsibility to stay abreast of all class announcements and changes made to this syllabus in class, the material covered in class whether present or not.
- You are expected to review all graded homework and exam papers as soon as they are returned. All questions about the grading of quizzes, homework or exam papers must be reported within **five** calendar days of the date on which the paper was returned.
- This class will be very active and I expect you to participate as much as possible. To do well, attend class every meeting on time, be prepared to work for the full class time, be organized, bring all necessary materials to class, do the homework and extra problems steadily every day rather than once a week and follow instructor directions. Don't be afraid to make mistakes or ask questions, the more you get involved, the better you'll do!
- **My door will always be open and you should feel free to e-mail me if you have questions.** Don't stress out about Statistics! You have the abilities to do very well as long as you work hard.

Course Outline

Priority will be given to understanding the material in depth rather than covering more topics. This schedule is subject to change by the instructor. Any changes to this schedule will be announced in class and posted on blackboard.

Day and Date	Chapters to Read Before Class	Topics	Assignment Due
Tuesday June 5	1, 2,3, 4, 19, Appendix A	Introduction to the Course & SPSS Central Tendency & Variability, displaying Data	None
Thursday June 7	5, 6, 7	Correlation Coefficient, Reliability and Validity, Hypotheses testing	HW1: Ch. 2, p. 33: 3, 5, 6, 8. Ch. 3, p. 48: 3, 4, 6, 7, 8. Ch. 4, p. 74: 2(by SPSS) 4, 5, 7.
Tuesday June 12	Ch. 8, 9, 10	The Normal (vs Abnormal) Curve, Inferential Statistics, The one Sample Z Test	HW2: Ch. 5, p. 96: 1, 2, 3, 7, 8, 9, 10 . Ch. 6, p. 123: 1 (2 articles), 2-7. Ch. 7, p. 138: 1 (2 articles),4, 5, 7-9. JAR1
Thursday June 14	Online Ch. 10		HW3: Ch.8, p.158: 4, 5, 6, 7, 8, 9 Ch9: p.179: 3, 4, 5, 6 Ch 10, p. 188: 1,2,3,4. JAR2
Tuesday June19	Review 1-9	Review and Midterm	Midterm exam
Thursday June 21	Ch. 11,12	t-test for 2 Independent Means, Variance and Factorial Analysis	JAR3
Tuesday June 26	Ch. 13 & 14	ANOVA, Factorial Analysis of Variance	HW4: Ch. 11, p.1,2, 3, 4, 5, 6, 7, 8 Ch.12, p.218:1, 2, 4, 5, 6.
Thursday June 28	15, 16, 17	Correlation, Regression, Chi-square Work on projects	HW5: Ch.13, p. 237: 1,2,3,4 Ch.14, p.251: 1, 2,3,4
Tuesday July 3rd		Prepare Projects, HW6, JAR4	HW6: Ch.15, P. 263:2, 3, 4,5,6 Ch.16,P. 281: 2, 6, 7 JAR4 Projects presentations
Thursday July 5	NA	Review ch2-16	Final Exam

Technology Use Policy:

I recommend that you have an access to a PC-based statistics program, such as SPSS for doing more substantial computations that may arise on projects or homework problems. It is **not** necessary to purchase SPSS for this course as it is available on the University's computer/math labs.

Journal Article Reviews: Three journal article reviews from peer reviewed counseling journals that describe statistical concepts of (choose any three) (1) measures of central tendency displayed in histograms or bar charts, (2) measures of association such as correlation, (3) prediction and regression, and (4) ANOVA. The journal article review should be one typed page with the following outline that describes: (a) research questions, (b) statistical methods, (c) results, and (d) conclusions. Use proper APA citation and reference.

Project Write-ups and Presentations: Group project with write-up to apply presented course material in meaningful counseling related topic. Each group must submit a written report and present the project in front of class.

Class Participation: Attendance and participation during all aspects of class is expected. Missing more than one class for a non emergency reason will result in a 30 point deduction per class missed.

Homework Policy:

You should view the assigned homework problems as the minimum number of problems required to attain some level of mastery of the material. I deem it acceptable for students to work in groups as they make their preliminary efforts to explore and work through homework problems. However, after any such preliminary and cooperative efforts, I expect each student to write up his/her final homework papers individually and without outside assistance. The act of copying another student's homework, or writing a problem solution as dictated by a tutor or from a solution manual, constitutes academic misconduct. You should do all homework problems but only selected problems will be graded. You should be as neat as possible on the homework and try to keep the problems in order with space between them. Late homework will **NOT** be accepted.

Exams & Make-up exams policy:

No makeup examinations will be allowed except for documented emergencies (See Student Handbook). All requests for make-up exams **MUST** be submitted to the instructor in writing, with the supported documents.

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. For more information, you may visit the Office of Disability Accommodation/Student Development Office, Suite 115 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is required because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Coming to class late or leaving early is considered an absence. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at [http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic Integrity.pdf](http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf)

for complete provisions of this code. In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement: **“On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.”**

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Center for Student Rights and Responsibilities as the instructor deems appropriate.