COURSE PREFIX: HIED 617.01W – HHPK 617.01W
Statistical Procedures for Education and Research
COURSE SYLLABUS: Spring Semester, 2013

Instructor: L. Rusty Waller, Associate Professor
Office Location: EDN 213
Office Hours: Face to Face Virtual Daily – I am available online.
Office Phone: 903-815-7926 Personal Cell Phone
Office Fax: 903-886-5507
University Email Address: Rusty_Waller@tamuc.edu

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings:

I recommend the following CD textbook with PowerPoint tutorials because I believe it will be of assistance to you. The price is $79.95 (+/-).

**CD Textbook & Power Point Tutorial – CD Version**
A Statistical Journey: Taming of the Skew!

*Authors: Dr. Donald F. DeMoulin and Dr. William Allan Kritsonis*

281 Page Digital Textbook – 450 Chapter by Chapter Power Point Presentation

To order, make payment in the amount of $79.95 to NATIONAL FORUM JOURNALS. Send ONLY check or money order to:

**NATIONAL FORUM JOURNALS**
Attn: Dr. Kritsonis
17603 Bending Post Drive
Houston, Texas 77095
(CD will be sent US Priority Mail)

Remember: Your payment is tax deductible as an educational expense.

YOU CAN ALSO ACCESS THE COURSE YOUTUBE VIDEOS AT [www.tamucdrdawg.com](http://www.tamucdrdawg.com)

*I am in the process of upgrading the YouTube materials. The new materials will be on this website as they are completed.*

Course Description:

HIED 617 Statistical Procedures for Education and Research (3 semester hours) provides an introduction to statistical methods and their implications for educators and educational researchers. Appropriate computer applications will be integrated with classroom content relating to populations and samples; organizing, displaying, and summarizing data; probability; normal distribution; tests of significance; correlation and simple regression; Z and T tests; and the chi square test. The course meets the requirements for a Level II research tool course.

Student Learning Outcomes:

HIED 617 Statistical Procedures for Education and Research is intended to address the following COURSE learning outcomes.
The engaged learner will:

- Describe the nature of probability and statistics;
- Organize data utilizing distribution curves;
- Describe data via statistical processes;
- Identify discrete probability distributions;
- Explain the normal distribution;
- Utilize confidence intervals based on sample size;
- Perform hypothesis testing;
- Test the difference between two means, two variances, and two proportions;
- Utilize correlation and regression procedures; and
- Apply Chi-Square tests.

### COURSE REQUIREMENTS

**Instructional / Methods / Activities Assessments**

**Lesson module exams** - A grade up to 100 can be earned on the lesson module exams. Please keep in mind that this is a doctoral level research tool course. Do not expect the instructor to explain why you missed a problem on the exam. When you take the exams, make notes regarding the questions and your responses. You are responsible for determining the accuracy of your answers. You are also responsible for the identification of reasons a particular question may have been missed. While this is not good pedagogical practice, this is solid andragogical practice. I want you to take responsibility for your learning. Work with and through your study group to master the material.

**Discussion participation** - A grade will be assigned for participation in the discussion group for each module. Generally this grade will be 5. A grade of 2 is given the first time that no participation in the discussion forum is evident. Afterwards, a grade of 0 is given.

**Reflection** - Each module will require that you post thoughts to the journal. The same participation grading methodology will be utilized for reflection activities as that utilized for discussion participation. Generally this grade will be 5. A grade of 2 is given the first time that no participation in the discussion forum is evident. Afterwards, a grade of 0 is given.

**Group Assignments** - Each student will be assigned to a study group. Each group will have a project for each module. The group should establish rules of operation and hold every member accountable. Please indicate on the first of the project the names of those who participated, as well as, the module for which the project is intended. Group assignments will be awarded a grade ranging from 10 downward.

**Grading**

The following final grading scale will be utilized to determine the final grade based on the average of your course work:

- A = 90 to 100
- B = 80 to 89
- C = 70 to 79
Module assignments must be submitted within established open and closing dates. Late work will not be accepted. Modules will not be reopened to permit completion of late work. Assignments not submitted within due dates will receive a grade of zero.

TECHNOLOGY REQUIREMENTS

This is an online course and some obvious technological resources will be required.

Access to a computer with
- Internet access (high-speed preferred)
- Microphone for classlive sessions throughout the semester (these run about $10)
- Speakers so you can hear me and others during our classlive sessions and other audio enhanced assignments throughout the semester.
- Word processing software (Microsoft Word preferred)

As a student enrolled at Texas A&M University-Commerce, you have access to an email account via myLeo - all my emails sent from eCollege (and all other university emails) will go to this account, so please be sure to check it regularly. Conversely, you are to email me via the eCollege email system or your myLeo email as our spam filters will catch yahoo, hotmail, etc. and I will not check for your email in spam.

HIED 617 will consist of nine online modules. These modules will be available on the indicated dates. The modules will NOT be accessible BEFORE or AFTER the indicated dates. Each module will include lecture material and voice over PowerPoint discussions. You will need internet access capable of accessing and viewing the indicated discussions. I am prone to send you out to YouTube presentations as well. Students must be able to access YouTube.

ACCESS AND NAVIGATION

eCollege Technical Concerns: Please contact the eCollege HelpDesk, available 24 hours a day, seven days a week, by sending an email directly to helpdesk@online.tamuc.org. You may also reach the HelpDesk by calling (toll-free) 1-866-656-5511, or through the Online Chat by clicking on the "Live Support" tab within your eCollege course.

Course Concerns: If you have questions pertaining to the content of this course (e.g., questions about an exam, about course due dates, etc.), please contact your instructor via email, through the "Virtual Office," or during office hours.

Other Questions/Concerns: Contact the appropriate TAMU-C department relating to your questions/concern. If you are unable to reach the appropriate department with questions regarding your course enrollment, billing, advising, or financial aid, please call 903-886-5511 between the hours of 8:00 a.m.- 5:00 p.m., Monday through Friday.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

Participation & Communication: I expect each of you to be active and thoughtful participants within the learning environment (eCollege) and your learning community. You are to expect the same of me. This includes completing the extensive readings related to course topics, team and/or individual research proposal topics and participation in proposal revision activities.
Email is the best way to reach me as I check it daily. A reply will be sent within 12 hours depending upon the time your message was received. Please do not send me panicked last minute emails with the word HELP!!!!!!! in the subject line. HOWEVER... in order to avoid duplication of questions and answers I prefer that you post all class related questions in the Q&A forum provided each week. It is likely that your peers will have the same question. Emails of a personal nature should be sent to my email address via eCollege.

Or if you want to talk via phone, you may contact me via my cell phone 903-815-7926. Please do not contact me before 9 am or after 9 pm.

**COURSE AND UNIVERSITY PROCEDURES/POLICIES**

The following items are standard expectations to be posted for all courses.

A. Class Participation:

Systematic and timely on-line participation is expected. University policy notes that excused absences include (i) participation in an authorized university activity, (ii) illness verified by a physician, (iii) death in the immediate family, and (iv) verifiable, official court appearance. Keep in mind that this course has been developed to allow maximum flexibility in regard to your online access. You are not required to logon at specific times on specific dates. You will work with other members of the class on specific tasks; however, this activity is determined by the group.

B. Assignments Submitted by Deadlines:

Assignments are due as stated. Class participants are strongly recommended to participate in their assigned groups. Numbers generate strength. Teaming is an essential soft-skill in every academic environment. Individual team members will be evaluated; however, teams often rise or fall together. Every team should select a lead member. Problems regarding team participation should be discussed with the course instructor. Under no circumstances should team members be allowed a free-ride at the expense of other members.

C. Courtesy and Respect:

**Student Conduct:** All students shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (See Student's Guide, Policies and Procedures, Conduct). HIED 617 is a doctoral level course. The course will require your best effort. Course demeanor is that which is expected at the university level. Students must complete their team assignments in a timely manner. Historically those who have not done due diligence to course assignments tend to redirect course expectations. Any such variation from class protocol is unacceptable at this level and will result in immediate removal from the course. **PLEASE KEEP IN MIND THAT THE COURSE E-MAIL IS NOT A FORUM FOR COMPLAINT OR PERSONAL ATTACKS!** Several have been embarrassed when discovering that these e-mails come to the instructor.

D. Academic Honesty:

Academic work submitted by you (such as papers, assignments, reports, tests) shall be your work or that of the team and referenced in part or in whole to the correct source. Submission of commercially prepared materials is unacceptable. Moreover, participants shall encourage honesty in others by refraining from providing materials or information with knowledge that these materials or information will be used improperly. Violation of these academic standards may result in removal or failure. Please see the TAMU-C Graduate Catalog and the Publication

Conduct that violates generally accepted standards of academic honesty is defined as academic dishonesty, which includes, but is not limited to plagiarism (the appropriation or stealing of ideas or words of another and passing them off as one's own), cheating on exams or other course assignments, collusion (the unauthorized collaboration with others in preparing course assignments) and abuse (destruction, defacing, or removal) of resource material. (Texas A&M University Commerce, Graduate Catalog).

E. Dropping the Class:

If you need to adjust your schedule by dropping this course, please follow university procedures to officially drop the class. If you fail to officially drop the class, a failing grade shall be assigned at the end of the course. Incompletes: Per university policy is granted only for circumstances beyond student's control which prevented the student from attending classes during Finals Week or the preceding three weeks (Policy A 12.07, 1998). The extension cannot exceed one semester. Failure to fulfill plan requirements within the specified time will result in an F.

F. Course Communication

Course communication will occur through your MyLeo Account. You will need to regularly and systematically review your e-mail on a timely basis.

G. Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu
Student Disability Resources & Services

If you are approved for assistance by the Office of Student Disability and Resources and Services, I will do all in my power to provide the necessary accommodations and modifications.

| COURSE OUTLINE / CALENDAR |

HIED 617 will consist of nine online modules. These modules will be available on the indicated dates. The modules will NOT be accessible BEFORE or AFTER the indicated dates.

Each module will include lecture material and voice over PowerPoint discussions. You will need internet access capable of accessing and viewing the indicated discussions. I am prone to send you out to YouTube presentations as well.

Once a module is opened, the module will remain open then close as indicated. This is done to help the entire class stay on track. While I realize that some may work ahead, the purpose is to bring the entire class along. To work ahead simply utilize the recommended textbook.
Module One: Terms and Concepts  
Open on January 14, 2013 Closed on January 25, 2013

Module Two: Normal Distribution Curve  
Open on January 26, 2013 Closed on February 8, 2013

Module Three: Confidence Intervals  
Open on February 9, 2013 Closed on February 22, 2013

Module Four: Advanced Confidence Intervals  
Open on February 23, 2013 Closed on March 8, 2013

Module Five: Hypothesis Testing  
Open on March 9, 2013 Closed on March 29, 2013

SPRING BREAK – March 11 to March 15 (I will be in Colorado)

Module Six: Comparing Two Means  
Open on March 30, 2013 Closed on April 12, 2013

Module Seven: ANOVA  
Open on April 13, 2013 Closed on April 26, 2013

Module Eight: Linear Regression  
Open on April 27, 2013 Closed on May 10, 2013

Module Nine: Chi-Squared Distributions  
Open on April 27, 2013 Closed on May 10, 2013

Each module may include discussions of various topics. The discussions are likely to utilize voice over PowerPoint and may reference materials available on the Internet. Additionally, to stimulate your cultural enrichment, some of the modules will include Waller’s Cultural Corner to examine some aspect of cultural enrichment. The latter is included since your evaluation of the course includes a question as to your enrichment in cultural understanding.

HIED 617 is a doctoral research tool. This course is very rigorous. In doctoral level education, the responsibility to learn falls squarely on the student. I want you to be successful. I want each of you to fully master this material. Keep this in mind as you consider the following.

I will be very, very reluctant to tell you what you missed on the tests. As an adult learner, you should make careful notes as you take the tests. If you miss a question, study your notes until you determine the error. By checking and rechecking your work, you will strengthen your abilities to analyze, synthesize, and evaluate information. You must assume responsibility for your own learning.

The goal in this course will be to abandon the pedagogical model in which the teacher is the fount of all knowledge. The pedagogical model should be replaced by andragogical model. You must take charge of your own learning. Work in groups. Share your ideas with others. Help each other. By building a viable cohort of friends, companions, and compatriots, you will do more than master this course. You will master all future courses and successfully navigate the waters of doctoral education to their desired end.

HIED 617 is a very important milestone in your development as an educator. The design and assessment of research at the doctoral level speaks to the very heart of the doctoral education. Avail yourself of the opportunity to engage this important topic.

Every member of the class is admonished to keep up with the materials. Do not miss the deadlines. This is a fast paced course. Every learner is individually responsible for staying on
Establish rules for the operation for your group. Hold every member accountable. Do not cover for anyone who does not participate! Each group is free to go through the stages of storming, forming, and norming. I suggest getting to the norming stage as quickly as possible. DO NOT LET A NON-PARTICIPANT HOLD BACK THE PROGRESS OF YOUR GROUP. Set due dates and require all members of the group to comply.

I know that working in groups is frustrating; however, the modern workplace is about group work. Teaming is a critical skill for success in today’s world.

Best wishes on your journey,

L. Rusty “DAWG” Waller