



**CED 610 – 01W-02W Intro to Graduate Statistics
Summer 2015**

Instructor: Dr. Shari Farris Assistant Professor
Office Location: Remote
Office Hours: Remote by appt
University Email Address: farris.shari@tamuc.edu

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings:

Required Texts:

Discovering Statistics Using IBM SPSS Statistics by Andy Field. Sage Publications (2013).

Required Software:

SPSS Statistical software (version 17.0 or higher are recommended; the book uses version 20). You can purchase and download a copy from <http://www.onthehub.com/spss/>. You can also get a copy from <http://studentdiscounts.com> (can be installed on two computers). Be sure that you choose the **Statistics Standard Grad Pack**. You can get a 6 month or 12 month license. The software is also on the computers in the student lab at the Metroplex and various labs on the Commerce campus. If you plan to take the second statistics course, your Tools III soon, you may want to purchase the **Statistics Premium Grad Pack**.

Course Description:

This course is intended to provide graduate students with an introduction to statistics and is approved by the Graduate School as a Level II research tool. The emphasis in this course will be upon understanding statistical concepts and applying and interpreting tests of statistical inference. Content will include but not be limited to: data and data files, data screening, scaling, visual representations of data, descriptive statistics, correlation and simple regression, sampling distributions, and the assumptions associated with and the application of selected inferential statistical procedures (including t-tests, chi-square, and one-way ANOVA). Computer software (SPSS) will be employed to assist in the analysis of data for this course. Students should

have access to a computer, SPSS software, and the Internet. This access is available at the Metroplex Center and on the Commerce campus in certain computer labs.

Student Learning Outcomes:

Develop and demonstrate an understanding of:

- Understand how and why statistics has developed as a tool of the scientific process
- Understand how data are collected and how observations are quantified during the scientific and research process
- Analyze how observations are represented and stored in a data file
- Develop and structure data files
- Understand the uses and limitations of statistical software
- Develop scaling and coding of data
- Analyze frequency distributions; how data can be represented visually, and the strengths and weaknesses of these representations
- Articulate methods of appropriately describing the central tendencies of various distributions
- Understand variability and how to quantify variability
- Articulate reasoning and assumptions underlying the inferential statistical process
- Understand probability, as it refers to inferential statistics
- Understand correlation and simple linear regression
- Analyze appropriate application and interpretation of various inferential statistical procedures, including the t-test, the Chi-square test, inferential tests applied to correlation, and basic ANOVA
- Articulate a simple description of methodology and results from analyses

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

This is an online class. All instructional activities and assignments will be delivered and received online using the eCollege learning media platform.

The course grade will be determined by the following combination of criteria:

- **Homework:** Will be assigned each session. It will consist of running and interpreting some form of data analysis. Completing or attempting the homework is very important to success in this class because it gives you an opportunity for practice and application. It is expected that mistakes will occur in practice; therefore incorrect (not incomplete or partially complete) answers on homework problems will not result in a significant penalty. For that reason, do not assume that high homework grades represent readiness for success on quizzes or exams. Deductions will be

made for poorly organized and labeled assignments or incomplete responses. Homework will count 50% of the course grade.

- **Quizzes:** Will be assigned each session and will cover homework, readings, and lectures. You will most likely be asked to interpret and answer some questions regarding an SPSS printout, as well as other content related questions. Quizzes will count 25% of the course grade.
- **Final Exam:** Will be cumulative and will count for 25% of the course grade.

Course Grading

FINAL GRADE:	A = 90-100%
	B = 80-89%
	C = 70-79%
	D = 60-69%
	F = 59% and below

TECHNOLOGY REQUIREMENTS

The following technological resources will be required.

- Access to a computer with Internet access (high-speed preferred)
- Document Productivity Software (Microsoft Office preferred)

ACCESS AND NAVIGATION

Our campus is optimized to work in a Microsoft Windows environment. This means our courses work best if you are using a Windows operating system (XP or newer) and a recent version of Microsoft Internet Explorer (6.0, 7.0, or 8.0).

Your courses will also work with Macintosh OS X along with Internet Explorer and Google Chrome.

It is strongly recommended that you perform a "Browser Test" prior to the start of your course. To launch a browser test, login in to eCollege, click on the 'myCourses' tab, and then select the "Browser Test" link under Support Services.

eCollege Access and Log in Information (7.1)

This course will be facilitated using eCollege, the Learning Management System used by Texas A&M University-Commerce. To get started with the course, go to:
<https://leo.tamu-commerce.edu/login.aspx>.

You will need your CWID and password to log into the course. If you do not know your CWID or have forgotten your password, please contact Technology Services at 903.468.6000 or helpdesk@tamuc-commerce.edu.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

ADA Statement

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

Room 132

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

StudentDisabilityServices@tamuc.edu

A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Scholarly Expectations:

All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. Work submitted at the graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the undergraduate level.

Dropping the Class:

At times, we become overloaded or have unplanned events that demand our attention. If you need to adjust your schedule by dropping this course, please follow university procedures to officially drop the class. Please do not just disappear. If you fail to officially drop the class, a grade must be assigned at the end of the course.

Late Work:

Late work is not accepted, **unless prior approval received by the instructor**. Points may be deducted. You will have plenty of notification to complete course assignments. If you know you are going to be out of town and unable to access a computer, plan ahead. See course semester calendar at the bottom of the syllabus.

Internet Outages.

In the instances when you experience internet outages and you are requesting an extension, documentation of the outage will need to be provided. Please contact your internet provider for the documentation. If you are in an area that is prone to frequent internet outages, I strongly urge you to seek alternate methods of accessing ECollege. Ecollege can be accessed on your smart phones. Additionally, there are numerous places where internet access is Free:

1. McDonalds
2. Starbucks
3. Public Library
4. Dairy Queen
5. Barnes and Noble
6. TAMUC Campus

Please have a back up plan for internet outages.

Computer/Technology Problems

In the instances when you experience problems with accessing ECollege, please contact IT for assistance. Please provide the instructor the name of the IT technician that provided you with assistance. The technician will also provide you with a "ticket number;" that number should also be forwarded to the instructor.

Please note that the acceptance of late work and requests for extension because of emergencies are provided at the discretion of the professor.

Interaction with Instructor Statement:

The best way to contact me is via email at shari.farris@tamuc.edu or via the virtual office. I check my email regularly every day of the week. You can also set up an appointment to speak by phone. Please check your TAMUC email regularly for announcements and other course related information.

Incomplete Grades:

Per university policy, you must visit with the instructor, develop, and sign "A Plan for Completing the Grade of X" before you may receive an incomplete for the course. The reason for such requests is limited to "**emergency circumstances beyond student's**

control which prevented student from attending classes during Finals Week or the preceding three weeks." You are notified that the deadline date for all plans is not to exceed one semester. Failure to fulfill plan requirements within the specified time will result in a course grade of F.

Academic Honesty:

Please see the TAMU-C Graduate Catalog and the Publication Manual of the American Psychological Association (2010) for the discussion of academic honesty. Academic honesty is especially important when it comes to citing/quoting sources in research papers and assignments. Students are responsible for reading this material and becoming familiar with the conventions for acknowledging sources of information. Consequences for academic dishonesty range from failing a specific assignment to expulsion from the University.

"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)

CALENDAR

Session	Topics	Readings	Homework Due	Quiz Due
Week 1	Intro to Statistics	Field, Chapters 1 and 3	June 14	June 14
Week 2	Z Scores and Normal Curve	Field, Chapter 1	June 21	June 21
Week 3	Statistical Models	Field, Chapters 2	June 28	June 28
Week 4	Hypothesis Testing Presenting Data	Field, Chapters 2	July 5	July 5
Week 5	Correlation	Field, Chapter 7	July 12	July 12
Week 6	Regression	Field, Chapter 8	July 19	July 19
Week 7	t-test for Independent Means, t-test for	Field, Chapter 9	July 26	July 26

	Dependent Means			
Week 8	ANOVA and Post Hoc Tests	Field, Chapter 11	Aug 2	Aug 2
Week 9	Chi-square	Field, Chapter 18	August 9	August 9
Final Exam: The exam will open the last week of class.				

No late work is accepted.