Elementary Statistical Methods
MATH. 2342. 63400; 63401; 93423; 93425
Spring 2016
1/20/16 – 5/12/16

Professor: R. Heiskell
Email: bheiskell@dccc.edu
Office Phone Number: 214-860-8777
Office Number: W263
Office Hours: 9:45-11:00am M-R
Meeting Days & Time: Online
Credit Hours: 3 Semester Hours

Division: Science, Technology, Engineering, & Mathematics (STEM)
Office Hours: M – F 8:00 am – 5:00 pm
Office Phone: 214-860-8760
Office Number: W147

Course Description: Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.

Course Pre-requisites: This is an entry-level course and is open to any student meeting TSI standards of college readiness (student must have appropriate assessment test score or have successfully completed DMAT 0310).

Course Materials/Supplies Needed:
MYSTATLAB ACCESS CODE (ISBN#9780321694645)
GRAPHING CALCULATOR REQUIRED
No Textbook required, ebook included with access code

THECB Learning Outcomes
Upon successful completion of this course, students will:
1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.
2. Recognize, examine and interpret the basic principles of describing and presenting data.
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
4. Explain the role of probability in statistics.
5. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.
6. Describe and compute confidence intervals.
7. Solve linear regression and correlation problems.
8. Perform hypothesis testing using statistical methods.
Core Statement:
MATH 2342 is a Tier 1 course in the Quantitative Reasoning learning category. “Knowledge and skills that are important to your success in other college courses will be introduced and reinforced in Tier 1. The Quantitative Reasoning category promotes the application of mathematics to increase your ability to solve "real-world" problem. When you are quantitatively literate, you can use logic and critical thinking in new ways.” - Catalog of the Colleges of DCCCD

Core Objectives:
MATH 2342 develops the following Core Objectives:
Critical Thinking – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
Communication – to include effective development, interpretation and expression of ideas through written and visual communication.
Empirical and Quantitative Skills – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Core Objective Development Statement:
MATH 2342 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to collect, analyze, present and interpret data and probability.

Course Outline:
Chapter 1 Data Collection
Chapter 2 Organizing and Summarizing Data
Chapter 3 Numerically Summarizing Data
Chapter 4 Describing the Relation between Two Variables
Chapter 5 Probability
Chapter 6 Discrete Probability Distributions
Chapter 7 The Normal Probability Distribution
Chapter 8 Sampling Distributions
Chapter 9 Estimating the Value of a Parameter Using Confidence Intervals
Chapter 10 Hypothesis Tests Regarding a Parameter
Chapter 11 Inference on Two Samples
Note: The instructor may omit certain topics in these chapters.

Evaluation Procedures:
Homework and interactive reading assignments 25%
Chapter Quizzes (11) 25%
Unit Tests (4) 20%
Comprehensive Final Exam 30%

Grading Scale:
Greater than or equal to 90=A
80.00-89.99=B
70.00-79.99=C
60.00-69.99=D
below 60 =F

Course calendar: Will be available by the first day of class

Late Work Policy: No late work accepted
Makeup Exam Policy: No makeup exams
The withdraw date for this class is April 14, 2016.

Certification Procedures: (For Online Courses)
Register your access code at www.coursecompass.com and set up a login and password. Enroll in my course with the course id number provided. You must be enrolled in my gradebook by census day to be certified as attending for financial aid purposes.

Getting Started

All work for this course is done using MyStatLab. You are required to purchase an access code which will give you access to all assignments and an e-book, as well as supplementary materials such as videos and power points. A separate handout explains how to purchase your access code and get started, this will be provided by the first day of class.

You must have the course id number to enroll in the class, this will be provided to you before the first day of class.

Getting Help

Mountain View has an Instructional Learning Lab that is open 6 days a week. Because Statistics is an upper level course, you might have to inquire when a tutor that is familiar with stats will be available.

INSTRUCTIONAL LEARNING LAB (W145/146)
Monday – Thursday 8:00 am – 9:00 pm
Friday and Saturday 8:00 am – 4:00 pm

I am available by email, I will be on campus infrequently so please do not leave a voice mail on my office phone. If you ask me a question by email, you must ask a specific question regarding a particular topic. I cannot answer questions like “I don’t understand Chapter 2”. You may email me questions regarding a specific homework problem by using the “Ask My Instructor” button. All emails will be answered within 24 hours, except those received Friday-Sunday which will be answered on Monday.

Academic Dishonesty:
Students that caught plagiarizing an assignment will be subject to an “F” in the course and possible expulsion from the college.

Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. More information is available at https://www1.dcccd.edu/catalog/ss/code.cfm.

Institution Policies: Please visit http://www.mountainviewcollege.edu/Academics/Documents/Institutional%20Policies.pdf for a complete list of institutional policies (Stop Before You Drop; Withdrawal Policy; Repeating a Course; Financial Aid; Academic Dishonesty; Americans with Disabilities Act Statement; Religious Holidays; and Campus Emergency Operation Plan and Contingency Plan.).