Elementary Statistics (Embedded)

MAT 123S T1

Tues./Thurs.: 2:40 - 4:10 PM, Room E227

Instructor - Kathy Hemenway

Text: Introductory Statistics by Neil A. Weiss 10th edition

Publisher: Pearson, ISBN 9780134270364 loose leaf book, OR

ISBN9780321694645 access code

Course description: 4 CREDIT HOURS

The course considers fundamental concepts of probability and statistics. The topics include exploratory data analysis (tables, graphs, measures of central tendency and dispersion), basic probability, applications of binomial and normal distributions, confidence intervals

and hypothesis testing.

Measurements: Tests (4) – 60%

Projects (2) – 30% Homework – 10%

Attendance: It is very important that you attend **ALL** classes. Your attendance in the

classroom, participation in classroom work /projects and preparation for

each class is required and is essential to your success in the course.

Support Services: Tutorial services. Most Important: Meet with me for an extra help.

Office Hours: TBA and by arrangement via email.

E-mail: khemenway@trcc.commnet.edu

Class Cancellation: In case of inclement weather, check the college website for class

cancellations or call 860-215-9000 for recorded message on the college phone.

Course Topics:

Nature of Statistics Descriptive Statistics and Measures Probability, Random Variables, and Sampling Distributions Inferential Statistics

Projects (details and due dates to be announced)

Course Objectives:

Upon the completion of this course students will be able to:

- 1. Construct and interpret graphs (histograms, bar graphs, stem and leaf plots) and tables (frequency and relative frequency) for data sets.
- 2. Calculate and interpret 3 measures of center (mean, median and mode) and select the appropriate the measure to use for the set of data presented.
- 3. Calculate and interpret 3 measures of dispersion (range, standard deviation, and five number summary) and select the appropriate measure to use for the set of data presented.

- 4. Solve and interpret word problems using the z score to measure relative position(s).
- 5. Understand and the use the definition of probability and the basic rules of addition, multiplication, and counting to solve probability word problems.
- 6. Understand and use contingency tables to solve probability word problems.
- 7. Understand and apply the appropriate probability distribution (binomial, standard normal or normal) to solve probability word problems.
- 8. Explain what the Central Limit Theorem is and how it is used in Inferential Statistics.
- 9. Determine appropriate sample sizes necessary for estimating population means.
- 10. Understand and develop confidence intervals for estimating population means.
- 11. Understand and use Hypothesis Testing to test a claim about a population mean.

ACCEPTANCE POLICY: After reading this syllabus, choosing to stay registered for this course exemplifies your acceptance of the syllabus and all policies and consequences outlined in the syllabus. If you do not agree with any of the terms in the syllabus, you are free to withdraw.

DISCLAMER: The instructor has the right to change/modify this syllabus at any time with proper notification to the class.

Sexual Misconduct:

BOARD OF REGENTS FOR HIGHTER EDUCATION AND CONNECTICUT STATE COLLEGES AND UNIVERSITIES POLICY REGARDING SEXUAL MISCONDUCT REPORTING, SUPPORT SERVICES AND PROCESSES POLICY

Statement of Policy for Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus:

"The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence."

Title IX:

UNITED STATES DEPARTMENT OF EDUCATION AND OFFICE OF CIVIL RIGHTS TITLE IX STATEMENT OF POLICY:

"Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient's educational programs and activities."

If any student experiences sexual misconduct or harassment, and/or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact Vicki Baker, the Diversity Officer and Title IX Coordinator: 860-215-9208 (vbaker@trcc.commnet.edu)

ACCOMMODATIONS:

Students with learning disabilities should contact the Learning Specialist, Matt Liscum, at 860-215-9265 or via email at mliscum@trcc.commnet.edu as soon as possible to ensure timely accommodations. Students with physical disabilities should contact Elizabeth Willcox at 860-215-9289 or via email at ewillcox@trcc.commnet.edu to facilitate accommodations. All testing accommodations MUST be discussed with the instructor in a timely manner, that is, *at least* one to two class meetings **prior** to any scheduled test for which accommodations are needed.

ACADEMIC DISHONESTY POLICY:

Academic integrity is essential in all aspects of college coursework and learning. I have zero tolerance for academic dishonesty. It is expected that **YOU** complete all your assigned ALEKS work. Communication or collaboration of ANY sort is ABSOLUTEY PROHIBITED during any exam. Academic Misconduct is punishable in a number of ways, including a score of a zero on the assignment where the cheating took place, a grade of an F in the course and/or possible censure on your permanent record. All cases of academic dishonesty will be referred to the Academic Dean. Do not let yourself come under the suspicion of academic dishonesty.)

DIGICATION:

As a student you will maintain an online learning portfolio using a college-designed template in Digication. Through this electronic tool you will have the opportunity to monitor your own growth in college-wide learning. It may even help you determine a major that is best suited to you. You will be able to keep and maintain your learning portfolio after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. If your work is selected and reviewed for assessment purposes, it will remain anonymous and private. Digication provides a "place" where you will connect your learning from the classroom, college, and life in general. Sometimes when you review all of the work you have done and think about it, you end up learning something different and perhaps unexpected. Please review your course outlines to determine what assignments to upload into the TRCC Digication template and please post your own choices, as well. Have fun in learning!