

Purpose: It is the intention of this Administrative Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title:	Support Class for Elementary Statistical Methods
Course Prefix & Number:	NCBM 0242
Division & Department:	Math & Physical Sciences: Math/College Readiness Math

Course Type	
X	Academic General Education Course (from ACGM, but not WCJC Core)
	Academic WCJC Core Course
	WECM Course
	This course is a Special Topics or Unique Needs Course.

Semester Credit Hours (SCH): Lecture Hours: Lab/Other Hours 2 : 2 : 0

Equated Pay Hours: 2

Catalog 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.

This course is designed to help students accelerate through the developmental math sequence in one semester. It focuses on the college readiness concepts necessary to successfully complete Elementary Statistical Methods concurrently. This class includes directed review, just-in-time instruction, and emphasis on math specific study skills. This course must be successfully completed with a "C" or better to satisfy TSI requirements.

List Lab/ Other Hours
Lab Hours
Clinical Hours
Practicum Hours
Other (List)

Signature		Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Pre-Requisites:

TSI Placement and Advisor/Instructor Recommendation

Co-Requisites: MATH 1342 Elementary Statistical Methods

I. Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

Unit 1 Review

- Fractions
- Decimals
- The Real Number Line
- Operations on Fractions
- Operations on Decimals
- Percent Notation
- Language Used in Modeling

Unit 2 Review

- Order of Operations
- Square Roots
- Simplifying Algebraic Expressions; Summation Notation
- Solving Linear Equations
- Using Linear Equations to Solve Problems

Unit 3 Review

- The Rectangular Coordinate System and Equations in Two Variables
- Graphing Equations in Two Variables
- Slope
- Slope-Intercept Form of a Line
- Point-Slope Form of a Line

Unit 4 Review

- Scientific Notation
- Interval Notation
- Linear Inequalities

II. Course Learning Outcomes

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.

Methods of Assessment

Final Exam (Required)

Other Methods of Assessment:

- Hour Exams
- Homework
- Quizzes
- Short Answer
- Discussion Board
- Participation
- Projects

III. Required text(s), optional text(s) and/or materials to be supplied by the student:

“Statistics: Informed Decisions Using Data”, by Sullivan, Pearson, 5th edition

Students must have computer access to the the WCJC website, their WCJC student email and online accounts. WCJC has open computer labs, with internet access, on all campuses for students to use.

IV. Suggested Course Maximum: _____ 15 _____

V. List any specific or physical requirements beyond a typical classroom required to teach the course.

VI. Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

- A. Final Exam 15-30%
B. Other Course Requirements 70-85%

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = 59 or below

VII. Curriculum Checklist:

Academic General Education Course (from ACGM, but not in WCJC Core)

- No additional documentation needed

Academic WCJC Core Course. Attach the Core Curriculum Review Forms

- Critical Thinking
- Communication
- Empirical & Quantitative Skills
- Teamwork
- Social Responsibility
- Personal Responsibility

WECM Course

- If needed, revise the Program SCANS Matrix and Competencies Checklist