



COURSE OUTLINE OF RECORD

Number: MATH C096

TITLE: Support for Introduction to Statistics

ORIGINATOR: Lisa Lee

EFF TERM: Spring 2019

FORMERLY KNOWN AS:

DATE OF

OUTLINE/REVIEW: 10-05-2018

CROSS LISTED COURSE:

TOP NO: 1701.00

CID:

SEMESTER UNITS: 2.0

HRS LEC: 36.0

HRS LAB: 0.0

HRS OTHER: 0.0

CONTACT HRS TOTAL: 36.0

STUDY/NON-CONTACT HRS RECOMMENDED: 72.0

CATALOG DESCRIPTION:

This course covers the underlying algebra skills and concepts, along with mathematical problem solving and study skills, that promote or are needed for success in Introduction to Statistics. Concurrent enrollment in specified sections of MATH C160 is required.

JUSTIFICATION FOR COURSE:

Required to provide support for underprepared students and to successfully implement AB 705 at Coastline College.

PREREQUISITES:

COREQUISITES:

- MATH C160: Introduction to Statistics

ADVISORIES:

ASSIGNED DISCIPLINES:

Mathematics

MATERIAL FEE: Yes [] No [X] Amount: \$0.00

CREDIT STATUS: Noncredit [] Credit - Degree Applicable [] Credit - Not Degree Applicable [X]

GRADING POLICY: Pass/No Pass [X] Standard Letter [X] Not Graded [] Satisfactory Progress []

OPEN ENTRY/OPEN EXIT: Yes [] No [X]

TRANSFER STATUS: CSU Transferable [] UC/CSU Transferable [] Not Transferable [X]

BASIC SKILLS STATUS: Yes [] No [X] **LEVELS BELOW TRANSFER:** Not Applicable

CALIFORNIA CLASSIFICATION CODES: Y - Not Applicable

NON CREDIT COURSE CATEGORY: Y - Not applicable, Credit Course

OCCUPATIONAL (SAM) CODE: E

REPEATABLE ACCORDING TO STATE GUIDELINES: No [X] Yes [] **NUMBER REPEATS:**

REQUIRED FOR DEGREE OR CERTIFICATE: No [X] Yes []

GE AND TRANSFER REQUIREMENTS MET:

COURSE LEVEL STUDENT LEARNING OUTCOME(S) Supported by this course:

1. Summarize data graphically and numerically.
2. Choose the proper statistical procedure for performing an experiment and collecting data.

COURSE OBJECTIVES:

1. Interpret data displayed in tables and graphically
2. Apply concepts of sample space and probability
3. Calculate measures of central tendency and variation for a given data set
4. Identify the standard methods of obtaining data and identify advantages and disadvantages of each
5. Calculate the mean and variance of a discrete distribution.
6. Create a support system including study groups, discussion groups, tutors, success coaches, friends and family members, along with supplemental resources and websites recommended by other students and the instructor.
7. Deal with testing and math anxiety, create a growth mindset, increase number and types of study skills, learn about meta-cognition and other aspects of the affective domain needed for success in college-level math.

COURSE CONTENT:

LECTURE CONTENT:

- A. Study Skills, Group Work, Affective Domain Discussions, and Use of Technology: Graphing Calculator, Statistical Software and Internet Search
- B. Learn How Statistics Is Different from College Algebra
- C. Decimals, Fractions, Percents, and Graphs
- D. Getting ready to Evaluate Statistical Formulas
- E. Preparing for Probability
- F. Evaluating Formulas for Probability Distributions
- G. Building Blocks for Working with Normal Distributions
- H. Interval of Numbers
- I. Formulas for Hypothesis Testing
- J. Formulas for Two-Sample Hypothesis Testing
- K. Linear Equations

LABORATORY CONTENT:

METHODS OF INSTRUCTION:

- A. Lecture:
- B. Online:
- C. Cable:
- D. Hybrid:

INSTRUCTIONAL TECHNIQUES:

The instructor shall deliver lectures of course content; assign homework and quizzes; deal with math anxiety by establishing a friendly, student-centered learning environment; relate material in the course to real life and the outside world; involve active learning; and require participation and regular, substantive interaction (RSI), including student-to-student and student-to-instructor interaction through the use of individual, small-group and whole-class discussion; apply and include technology to increase motivation such as graphing calculators, the Internet, and computer software; and include appropriate methods of summative assessment including midterm and final exams.

COURSE ASSIGNMENTS:

Reading Assignments

Reading assignments are included as part of studying for and completing homework, quizzes, midterm exam, final exam, interaction and discussion, and group projects as assigned.

Out-of-class Assignments

Out-of-class assignments are included as part of studying for and completing homework, quizzes, midterm exam, final exam, interaction and discussion, and website research projects as assigned.

Writing Assignments

Written and computer-based assignments are included as part of studying for and completing homework, quizzes, midterm exam(s), final exam, interaction and discussion, and group projects as assigned.

METHODS OF STUDENT EVALUATION:

Midterm Exam
Final Exam
Short Quizzes
Written Assignments
Objective Examinations
Report
Projects (ind/group)
Problem Solving Exercises
Oral Presentations
Skills Demonstration

Demonstration of Critical Thinking:

Students will be able to choose from a variety of approaches to solve and explain solutions and justify reasoning verbally or in writing and may be included in classroom discussions, quizzes, midterm examination, final examination, and projects.

Required Writing, Problem Solving, Skills Demonstration:

Students will be able to choose from a variety of approaches to solve and explain solutions and justify reasoning verbally or in writing and may be included in classroom discussions, quizzes, midterm examination, final examination, and projects.

TEXTS, READINGS, AND RESOURCES:

TextBooks:

1. Triola, M. *Elementary Statistics*, 13th ed. Pearson, 2018

Other:

1. Coastline Library: www.coastline.edu/library/

LIBRARY:

Adequate library resources include: Online Materials

Comments:

Attachments:

[Attached Files](#)