COURSE SYLLABUS

MAT-150 STATISTICS I

COURSE DESCRIPTION: Statistics I is a study of frequency distributions, measures of central tendency and dispersion, probability, the normal distribution, sampling and sampling distributions, the central limit theorem, confidence interval estimation, and hypothesis testing.

CREDITS/HOURS: 3 credits, 3 hours

PREREQUISITE: MAT-031/032 or MAT-035 or equivalent by testing.

GEN’L ED COURSE: Yes

STUDENT LEARNING OBJECTIVES: Upon successful completion of this course the student will be able to:
1. Create graphical displays of data and use the graphs to analyze the data.
2. Demonstrate comprehension of appropriate statistical terminology.
3. Compute measures of dispersion, central tendency, and relative positions.
4. Use the results of the Central Limit Theorem to construct and interpret a sampling distribution.
5. Analyze sample data in order to construct a confidence interval and make inferences based on the results.
6. Conduct a test of hypothesis to draw conclusions about the validity of a claim.

ASSESSMENT MEASURES: Each of the above listed student learning objectives will be assessed by,
1. Written assignments and/or quizzes.
2. Written examinations
3. Other, as announced by the instructor

COURSE GRADE: Students should refer to the instructor’s grading policy which will be distributed during the first meeting of the class.

TEXTBOOK: Statistics I, Allan Bluman; 8th Edition
Custom Edition for Bergen Community College, McGraw Hill

Each student must have their own scientific calculator.
COURSE CONTENT:

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* Optional – A maximum of three classes for the combination of these topics.

Larson and Farber, Elementary Statistics, Pearson/Prentice-Hall
Richmond, Statistical Inference, Ronald Press.
Weinberg and Schumaker, Statistics: An Intuitive Approach, Brooks/Cole

ELECTRONIC DEVICES: The Department of Mathematics prohibits the use of cell-phones, PDA’s, laptops, headphones, IPODs and other such devices in mathematics classes unless otherwise specified by the grading policy provided by the instructor at the beginning of the semester.

FACULTY ABSENCE PROCEDURE: “CLASS CANCELLATIONS” may be found by clicking on the bottom of the Bergen Community College website, [www.bergen.edu](http://www.bergen.edu). A list is also posted in a glass case near A-129, the main corridor on the first floor and in Ender Hall. Students may consult these listings before going to class. If a cancelled class is not listed, it should be reported to the Dean’s Office (A-325) or the Evening Office (L-113).

WEBSITE: Go to [www.bergen.edu/math](http://www.bergen.edu/math) for more information regarding the Mathematics Department.