COURSE DESCRIPTION: Calculus for the Managerial and Social Sciences cover the essential ideas of the Calculus: functions, limits, continuity, derivatives and integration. The course includes applications to problems in business, economics, psychology and the social sciences.

CREDITS/HOURS: 3 credits  3 hours

PREREQUISITES: MAT-160 with a grade of C or better or by proficiency examination.

GENERAL EDUCATION COURSE: Yes

STUDENT LEARNING OBJECTIVES: Upon successful completion of this course the student will be able to:

1. Evaluate the domain and range of a function.
2. Demonstrate the ability to find the equilibrium point given a supply function and a demand function.
3. Evaluate and interpret limits using numerical, graphical, and algebraic methods.
4. Demonstrate the ability to recognize and interpret continuous functions.
5. Compute an average rate of change.
6. Demonstrate the ability to analyze and solve problems involving rates of change by applying the derivative.
7. Sketch curves using techniques of calculus.
8. Solve maximum-minimum and related rate problems with business and economic applications using calculus.
10. Solve exponential growth problems using calculus.
11. Evaluate definite and indefinite integrals using basic formulas and the substitution method.
12. Solve business and economic problems involving antiderivatives.
13. Given a demand and supply function, find the consumer’s surplus and producer’s surplus at the equilibrium point.
14. Solve applications relating to business and the social sciences.

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.


CALCULATOR: Scientific calculator (not graphing)

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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. 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 Department Office (A-325) or the Adjunct Office (C-107).

WEBSITE: Go to www.bergen.edu/math for more information regarding the Mathematics Department.