# BERGEN COMMUNITY COLLEGE DIVISION OF MATHEMATICS, SCIENCE AND TECHNOLOGY DEPARTMENT OF MATHEMATICS

#### **COURSE SYLLABUS**

### MAT-092 CALCULUS I SUPPORT

**COURSE** Calculus I Support is a recitation class designed to provide additional instructional time

**DESCRIPTION:** for students enrolled in or repeating MAT-280.

CREDITS/HOURS: 1 credit (non-degree), 1 hour

**PREREQUISITE:** A grade of C or better in MAT-180 Precalculus or by proficiency examination.

**COREQUISITE:** MAT-280

## STUDENT LEARNING OBJECTIVES:

## Upon successful completion of this course, students will be able to:

- 1. Evaluate and interpret limits;
- 2. Recognize and interpret continuous functions;
- 3. Demonstrate the ability to analyze and solve problems involving rates of change by applying the derivative;
- 4. Solve related rate and optimization problems using calculus techniques;
- 5. Sketch curves using the techniques of calculus;
- 6. Evaluate definite and indefinite integrals using basic formulas and the substitution method;
- 7. Find the area between two curves;
- 8. Use differentials in the solution of applied problems.

## ASSESSMENT MEASURES:

Each student is required to keep a class-folder for this course. The class-folder should contain:

- This course outline:
- Class-folder due dates sheet:
- Hand-outs from this class;
- Graded assignments, quizzes, tests;
- Your weekly journal entry;
- Your weekly assignment.

You are required to hand in this class-folder each week, at least twenty-four hours prior to the class meeting time.

**Record of Grades:** When an assignment, quiz, or test is returned to you by your MAT-280 instructor, record your grade on this item on the class-folder due dates sheet. When you complete corrections to the graded item, attach the corrections to the graded item and place these papers in your class-folder.

Weekly Journal Entry: Each student is to keep a weekly journal. Your weekly journal entry must include:

- A brief description of the material covered in your MAT-280 class during the past week.
- A brief description of those topics where you are having difficulties, with an example of the type of problem that causes difficulties, specifically indicating the point at which the difficulty arises.

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

**TEXTBOOK:** <u>Calculus, Early Transcendentals Functions</u>, with CalcChat® and CalcView®, 7<sup>th</sup> Edition, Larson/Edwards, Cengage Learning Publisher.

## **EXTRA HELP:**

The <u>Cerullo Learning Assistance Center</u> in L-125, provides one-on-one and small group tutoring assistance. A schedule of the Center's activities is posted on the bulletin board outside the Center. The office may be reached by telephone: 201-447-7489.

The Math and Science Walk-In in L-131, is for students to work on assignments or study for exams. Tutors and/or faculty may be available for assistance.

The <u>Online Tutoring</u> is provided by Smarthinking. Applications for this service are available in the Cerullo Learning Assistance Center Homepage or L-125.

ELECTRONIC The Department of Mathematics prohibits the use of cell-phones, PDA's, DEVICES: laptops, headphones, IPODs and other such devices in mathematics classes

unless otherwise specified in the grading policy provided by the instructor

at the beginning of the semester.

**FACULTY** CLASS CANCELLATIONS may be found at http://www.bergen.edu/classcancellations

**ABSENCE** A list is also posted in a glass case near A-129, the main corridor on the first floor and in Ender Hall. If a cancelled class is not listed, it should be reported to the Department

Office (A-327) or the Adjunct Office (C-107).

**WEBSITE**: Go to http://www.bergen.edu/academics/academic-divisions-departments/mathematics for

more information regarding the Mathematics Department.

STUDENTLearning Assistance CenterRoom: L-125879-7489SUPPORTMath and Science Walk-InRoom: L-131879-7489SERVICES:Office of Specialized ServicesRoom: L-115612-5269