## Math 0120 Business Calculus Student Guidelines and Syllabus

**Textbook:** Brief Applied Calculus, Seventh Edition, by Geoffrey C. Berresford and Andrew M. Rockett; Brooks/Cole CENGAGE Learning.

Course Prerequisites | Minimum math placement score of 61 or Math 0031 with minimum grade of C.

**Course Description:** This course is designed for students in business, economics, and other social sciences. It introduces the basic concept of limit and its application to continuity, differentiation, integration, maximization, minimization and partial derivatives. Applications to the social sciences, especially business and economics, are stressed. The calculus of trigonometric functions is not covered.

**Course Organization:** The course consists of lecture and recitation components. Each student must register for a recitation that is associated with the lecture that he or she is attending. Lectures are M,W,F. Recitations are scheduled on Tu and Th of each week. Recitations will be devoted to problem solving and quizzes. The student should read each section before the lecture on that section.

Homework: Homework will be done online. The URL for your calculus homework is

https:webwork.math.pitt.edu/Math0120-xxxxx with xxxxx replaced by the five digit class number for your section. Alterntively, you can go to <a href="https://webwork.math.pitt.edu">https://webwork.math.pitt.edu</a> and select your course from a list of available courses. You will need to log on with your Pitt username and password. Once you log on, you will see a list of available homework assignments and due dates.

**Tutoring:** Walk in tutoring is available in the Calculus/Engineering Lab and in the Math Assistance Center (MAC) in room 215 of the O'Hara Student Center. Tutoring hours will be posted outside the lab and the MAC, as well as on the web at <a href="http://calculus.math.pitt.edu">http://calculus.math.pitt.edu</a>.

## **Learning Outcomes: Students of the course will be able to:**

- Find limits of functions presented as graphs, tables, or algebraic expressions.
- Use the concept of limit to define the derivative of a function.
- Differentiate functions involving powers, exponentials, and logarithms.
- Apply the concepts of differentiation to solve optimization problems.
- Use the derivative to hand sketch the graphs of functions involving powers, exponentials, and logarithms.
- Find indefinite integrals of functions involving powers, exponentials, and logarithms.
- Find definite integrals of appropriate functions.
- Apply the definite integral to solve problems.
- Find partial derivatives of functions of two variables.
- Apply the method of Lagrange multipliers to solve constrained optimization problems.

**Calculator Policy:** A graphing calculator or graphing software may be useful for some of the practice problems and online homework. Your instructor may or may not permit usage of calculators on the midterm examinations. Calculators will not be permitted on the Departmental Final Examination.

**Final Examination Policy:** The one-letter-grade rule applies: A student's course grade in Math 0120 will not exceed her/his grade on the Math 0120 Departmental Final Examination by more than one letter grade.

**Grade Policy:** The student's course grade will be based solely on her/his performance on the Homework, the quizzes and examinations as follows:

 Homework
 15%

 Quizzes
 15%

 Exam #1
 15%

 Exam #2
 15%

 Exam #3
 15%

 Departmental Final Exam
 25%

**Students with Disabilities**: A student with a disability for which he or she is requesting an accommodation, is encouraged to contact both the instructor and the Office of Disability Resources and Services, 140 William Pitt Union (412) 648-7890 as early in the term as possible.

**Academic Integrity:** Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity will incur a minimum sanction of a zero score for the quiz, exam or paper in question. Additional sanctions may be imposed, depending on the severity of the infraction. Students may work together or use library resources to do homework, but each student must write his or her own solutions independently. Copying solutions from other students will be considered cheating, and handled accordingly.

**Classroom Conduct:** All students are expected to report to class on time, refrain from individual conversation during class, turn cell phones and pagers off or to "vibrate", refrain from texting and surfing the internet in class, and show respect for fellow students and faculty.