MATH 203

BUSINESS CALCULUS

(8:00-9:15 TUESDAY/THURSDAY WALTERS 281)

FALL, 2006

Course Designation

MAT 203. BUSINESS CALCULUS. Graphs, lines, functions, limits, continuity, curve sketching, differentiation, optimization and their applications to business with polynomial, algebraic, exponential and logarithmic functions, functions of several variables and partial derivatives. Prerequisites: MAT 106 or a grade of “C” or higher in MAT 104. 3 hours.

Text


General Course Objectives

Upon completion of the course, the student will be able to:

1. Recognize, graph, and demonstrate an understanding of the behavior of linear, polynomial, exponential, logarithmic, and algebraic functions.
2. Demonstrate an understanding of the concept of the derivative of a function.
3. Demonstrate an understanding of the concept of the definite integral of a function.
4. Determine the derivatives of linear, polynomial, exponential, logarithmic, and algebraic functions.
5. Use the derivative in business applications to include marginal analysis and optimization.
6. Use the integral in applied business settings.

Subject Matter or Content to be Studied

1. Brief review of linear, polynomial, exponential, logarithmic, and algebraic functions.
2. The derivative
3. The definite integral
4. Business applications of the derivative
5. Business applications of the definite integral

Activities and Requirements

1. Class attendance, as determined by the regulations of the University and the Department.
2. Homework exercises to be completed by the student and graded at the discretion of the instructor.
3. Participation in class discussion.
4. Scheduled tests will be given periodically throughout the semester. Students will be given adequate notice.
5. A comprehensive final exam will be given as scheduled at the end of the semester.
6. Regular and punctual attendance is necessary for successful completion of this course.
Presentation Methods
Lecture with demonstration to include the use of graphing calculators and computer software (80%); class discussion (20%).

Tutoring Service
Free tutoring will be available in the Academic Support Lab, Union 311.

Evaluation and Grading
A series of class tests, pre-announced, will be administered during the semester and returned promptly to the students. Homework will be collected periodically and graded. Unannounced daily quizzes may be given throughout the semester. The homework/quiz grade will count the same as a major test grade. In addition, a comprehensive final exam will be administered and will constitute approximately 25% of the grade for the semester. There will be at least one question on each test that requires you to provide a written explanation of a concept. Evaluation of the answer to this question will include mathematical content, spelling, grammar, and sentence construction.

Grading Scale
Grades will be assigned according to the following scale:

A (90 - 100)  B (80 - 89)  C (70 - 79)  D (60 - 69)  F (below 60)

Cheating and plagiarism are not tolerated. If it is established that a violation has occurred, the instructor may determine the penalty, or he may report the offense to the department chair and dean of the school. The usual penalty involves a grade of zero on the test, examination, or paper in question.

Make-Up Tests, Class Attendance, and Tardiness
A student absent from class and missing a scheduled test is entitled to a make-up test if evidence is presented to the instructor that the absence was due to personal illness or death in the immediate family. Absences authorized by the Vice President for Academic Affairs for official purposes (athletics, performing groups, student government, etc.) also entitle a student to make-up test privileges. Any absence from scheduled work must be covered by an excuse from the Vice President for Academic Affairs, the Student Health Service, or a doctor before the student is allowed to make up that work. Any exception to this rule must be arranged before the missed work! Each student is directly responsible to the individual faculty member for making up work missed due to excused absences. ALL make-up work must be completed within one week after returning to class. In order to receive credit in this course, a student must attend a minimum of 75% of the class meetings. Students in this class will be allowed no more than 7 absences, excused and unexcused. If a student exceeds the allowable number of absences, a grade of "F" will be assigned in the course. Absences accrue from the first day the class meets, not the first day a student attends the class. If you are late registering for the class, any class meetings you missed prior to the first class meeting you attend will be considered an absence. In order to be counted present, a student must arrive on time for the class and remain in class the entire time. When a student is tardy for class, it is the student's responsibility to talk to the faculty member about changing the recorded absence to a tardy. This must be done on the day that the tardy occurred. Failure to do so will result in a recorded absence.
Classroom Policies

1. Do not use tobacco or eat in the classroom.
2. Do not bring guests, including children, to class.
3. Do not bring cell phones or beepers to class.
4. Come to class on time.
5. Be prepared to start class at the scheduled time. Have paper, pencil, book, homework, etc. out and ready.
6. Do not ask to leave class early. Schedule any appointments at times that do not conflict with classroom time.
7. Calculator use is permitted on all homework assignments and tests.
8. Be sure to show all work on homework assignments and tests. No partial credit can be given if no work is shown.
9. Homework must be turned in when it is due. No late homework will be accepted.
10. Cheating and plagiarism are not tolerated. If it is established that a violation has occurred, the penalty will be a zero on the test, examination, or paper in question.
11. It is the responsibility of the individual student to inform the faculty member of any clinically diagnosed learning disability or other limiting disability that might in some way hinder the student's progress in this class. Reasonable accommodations are available upon request.
12. Do not bring beepers or cellular phones to class.

Important Dates

Students who remain in the course more than one week after the first test, and who then elect to drop the course will receive a grade of W if passing or a grade of F if failing the course at the time of the drop. A drop is not effective and complete until the drop slip has been signed by all parties designated and turned in to the Registrar's office. No course may be dropped after November 9. The final examination for this course is scheduled for Tuesday, December 5, 2006 at 8 am. That is when it must be taken. If you plan to audit this course, you must notify the instructor by August 28. You will not be allowed to change your status in this class from credit to audit after this date.

If a student has a disability that qualifies under the Americans with Disabilities Act and requires accommodation, he should contact Dr. Richard Houston in the Office of Disability Services at 846-4690.

Instructor: Dr. Paula Norris

Instructor's Office: Walters, 270-E

Office Phone: 846-4515
Instructor's e-mail address: pnorris@deltastate.edu

Instructor's Office Hours:

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