

DELAWARE COUNTY COMMUNITY COLLEGE

TERM:

Business Calculus

CRN 3052

MAT136 – 95A

I. PROFESSOR CONTACT INFORMATION

Instructor Name: Daniel Juncos

Class Time: MW 6:00 p.m.-9:00 p.m.

Classroom: EX106

E-mail: djuncos@dccc.edu

II. COURSE DESCRIPTION, COMPETENCIES & PREREQUISITES

Course description: This course is designed primarily (but not exclusively) for Business Majors. Topics include graphing and solving problems using linear, quadratic, rational, square root, log, and exponential functions, solving systems of equations, performing operations on matrices, linear programming, and applications from business and economics.

Course competencies

Competency 1: Algebra Review - Expressions vs. equations, polynomials / factoring, rational expressions, solving equations, solving inequalities, exponents, and radicals

Competency 2: Functions/Graphing - Definition of the graph, definition of the graph, transformations of graphs, domain and range, sums/differences, products/quotients, and compositions of functions

Competency 3: Linear Functions - Slope of a line / different forms of a line, graphing linear functions, recognizing linear relationships, linear approximation in quantitative analysis, economic applications of linear functions, and linear regression

Competency 4: Quadratic Functions / Polynomials - Calculating minimum / maximum on an interval, graphing polynomials, finding zeros, and economic applications

Competency 5: Rational Functions - Calculating minimum / maximum on an interval, finding zeros, identifying domain and range, points of

discontinuity / asymptotes, economic applications

Competency 6: Exponential / Logarithmic Functions - Graphing exponential/logarithmic functions, growth/decay models, properties of logarithms

Competency 7: Linear Programming - System of linear equations / matrices, echelon method, Gaussian reduction, matrix operations, graphing linear inequalities, solving linear programming problems graphically

Prerequisite: MAT128 or equivalent placement courses

III. COURSE MATERIALS

Text: *Business Precalculus and Business Calculus, Fourth Custom Edition for DCCC, taken from 'Finite Mathematics' (11th Edition; Lial, Greenwell, Ritchey) and 'Calculus and Its Applications' (11th Edition; Bittinger, Ellonbogen, Surgent)*

DESMOS Graphing Calculator Application

Basic calculator (the default calculator on your phone will suffice)

IV. COURSE REQUIREMENTS and/or Procedures.

The course calendar can be found here:

<https://djuncos.github.io/math135.html>

This calendar gives the breakdown of the course class by class. For each class, it gives the homework due, what topics/sections will be covered, and any material I plan to hand out. **It is subject to change, and I will update it regularly.**

****Important*: THIS IS AN ACCELERATED CLASS! We have exactly 15 classes in which to cover a sizable amount of material. You can't afford to miss even one class! We're going to move very quickly. I am more than happy to respond to any questions you may email me about homework problems, etc., and will do so quickly. But you will have to start the homework to be able to ask them.***

Participation: Class participation will not be factored into students' final grades.

Missed Exams: I will be posting solutions online to exams immediately after their scheduled times, so no late exams will be given without a doctor's note.

****PLEASE*: DO NOT MISS AN EXAM, EVEN IF YOU THINK YOU'RE AREN'T PREPARED FOR IT! I have failed more than one student because a missed exam's score of zero brought his/her class average below passing level.***

V. ATTENDANCE

Please be aware of recent changes to the College Attendance & Withdrawal Policy. Attendance is expected at all class meetings. Students who do not attend and/or log in to class during the first three weeks of class or who only attend the first day and/or log in once WILL BE ASSIGNED THE REGISTRATION CODE OF "NS" (NO SHOW) as of the 4th week of classes. Instructors will NOT withdraw students for non-attendance. Students will be responsible for withdrawing themselves from their courses and may do so until the semester Student Withdrawal date (see your student handbook for information.) Students who wish to be withdrawn from a class after the Student Withdrawal date will need to meet with the appropriate administrator. Please refer to the Student Handbook for more details on this policy.

VI. PLAGIARISM / ACADEMIC DISHONESTY POLICY

The College regards academic dishonesty as unacceptable behavior that could result in dismissal. Please refer to the Student Handbook for more details under "College Policies and Procedures" at <http://www.dccc.edu/campus-life/helpful-links/student-handbook/college-policies-procedures>

VII. GRADES

Attendance: Attendance will not be factored into students' grades.

Homework: Homework will be assigned at the end of every class and due to be reviewed and discussed during the next class. It will not count towards students' final grades.

Quizzes: There will be a daily quiz at the beginning of each class testing the material covered during the previous class. They will comprise 20% of each student's final grade.

Exams: Exams will be in-class. There will be two Exams (25% each), and a Final (30%).

Final Course Grade:

Final Average	Final Grade
100 - 90	A
80 - 89	B
70 - 79	C
60 - 69	D
59 and less	F

VIII. STUDENTS WITH DISABILITIES

Delaware County Community College policy complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students requesting academic accommodations **must** register with the Office of Disability Services and are responsible for picking up their accommodation letters at the beginning of **each** semester and presenting them to their instructors. I am available to discuss the approved accommodations that you may require in this course. If you have any questions, contact Ann Binder, Director of Disability Services, at 610-325-2748 or by email at abinder@dccc.edu. Students on branch campuses can contact Jennifer Uber, Assistant Director of Disability Services, at 484-237-6251 or by email at juber1@dccc.edu.

IX. LEARNING COMMONS

The Delaware County Community College Learning Commons serves as a center for students, faculty and staff in a dynamic space that supports the College's commitment to student success. Library Services, Writing and Tutoring Services and Technology Services are available to active students and may be accessed on a walk-in basis or by appointment. The Learning Commons at the Exton Center is open Monday through Thursday from 8:00am until 8:00pm, as well as on Fridays from 8:00am until 1:00pm. Question? Please call 610-450-6511 during scheduled business hours.

The Learning Commons locations:

Marple Campus, Fourth floor of Founders Hall
Downingtown Campus, Room 218
Exton Center, Exton II, Room 234
Pennocks Bridge Campus, Room B-135
Southeast Center, Room 108
Upper Darby Center, Room 114

Many textbooks and course materials are available to borrow from the Learning Commons' circulating and reserve collections. Librarians can help you with your research, citations, and using library services. Go to dccc.edu/library or to the Library tab in delaGATE.

X. TUTORING RESOURCES

Students who would like tutoring or help with planning, revising, or documenting written assignments can schedule a session by visiting the Learning Commons at any location.

Tutoring is usually available for subjects in Math and Biology, as well as writing-intensive courses such as Sociology, English and History. Tutor schedules are available in the Learning Commons.

XI. ASSESSMENT STATEMENT

Delaware County Community College is committed to the continuous improvement of its courses and programs. The assessment of student learning outcomes is an essential component of that effort. Student work in this course may be used to determine the extent to which the course competencies, program outcomes, or college academic learning goals are being met. Student work will be used in a way that preserves the anonymity of the student. If a student's work is used for assessment purposes, the fact that a student's work has been used for assessment will have no impact, positive or negative, on a student's grade.

XII. DCCC's COMMITMENT TO DIVERSITY

Students are expected to show respect for their classmates, themselves, and their instructors by conducting themselves with maturity, demonstrating sincere interest in the ideas of others, and employing good manners.

Students are expected to show appreciation for the diversity of backgrounds and skills of their classmates. Violations of equal educational opportunities should be reported according to procedures given in the Student Handbook. General complaint and sexual harassment complaint procedures are detailed in the Student Handbook.

XIII. IMPORTANT INFORMATION

No part of my lecture (or laboratory) can be recorded (audio or video) without my written permission. A student requiring this particular academic accommodation must register with the Office of Disability Services at the beginning of each semester and then provide me with the official accommodation letter.

In general, cell phones, iPods, texting devices, laptop computers, and all other electronic devices and technologies with calculation software, memories, or communication capabilities may **not** be used during testing and must be removed from the desk and put away. Under certain circumstances, as clearly stated by the Instructor, certain calculators, electronic devices, and other technologies may be used during testing. This **only** applies to testing situations and **not** to the appropriate use of calculators, electronic devices, and other technologies during teaching/learning activities.

XIV. SCHEDULE OF IMPORTANT DATES AND DEADLINES

The course calendar can be found here:

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