

MATH 115 AMB: *Quantitative Methods for Decision Making*, 4 hrs, 4 crs

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Office Hours	By Appointment	Course Schedule ROOM: AC 1E03 Sun 12:30-4:20

Textbook: Lial, Hungerford, and Holcomb. *Mathematics with Applications: In the Management, Natural, and Social Sciences*, Fourth Custom Edition for York College, Pearson Education, Inc., 2011.

Course Description: Functions, systems of linear equations, matrices, elementary linear programming, elementary calculus, mathematics of finance, and related topics.

Prerequisites: MATH 102, the equivalent, or placement examination.

Course Objectives:

1. Understand basic properties and applications of equations, inequalities, functions and their graphs, and the fundamentals of calculus and its applications.
2. Apply properties of exponential and logarithmic functions to study interest, annuities, future and present values.
3. Learn the fundamentals of linear algebra and solve systems of linear equations using matrix techniques. Apply the basics of linear programming and the simplex method.

Sections Covered and Topics:**Sections**

2.1 - 2.5	Graphs, Linear Equations and Inequalities (4 hours)
3.1 - 3.7	Functions and their Graphs (6 hours)
4.1 - 4.4	Exponential and Logarithmic Functions (6 hours)
5.2 - 5.4	Interest, Present and Future Value (6 hours)
6.1 - 6.6	Systems of Linear Equations and Matrices (10 hours)
7.1 - 7.4	Linear Programming, Applications and the Simplex Method (8 hours)
11.1 - 11.9	Basics of Differential Calculus (10 hours)
12.1 - 12.4	Applications of the Derivative (time permitting)

Calculators: A basic scientific calculator is required for this course.

Attendance: Students are expected to attend each class session. There is no cut allowance. Students may be required at any time to account for undue irregularity in attendance by personal explanation to their instructor (and, for SEEK students, to their counselor).

Any student who has been excessively absent from a course and does not present adequate documentation to the instructor, may receive the grade of WU (unofficial withdrawal), which is computed as an F.

Students absent for illness for more than one week will be required to present to the instructor medical documentation of the illness, including an indication that they are well enough to return to their classes. Students absent for more than one week for reasons other than illness will also be required to furnish documentation of reasons.

Grading Policy:

Homework, participation and attendance (10%) + quizzes (10%) + Tests (20%) + Midterm (20%) + Final(40%). Students are expected to do the homework assignments timely, which are assessed through quizzes and tests. Final exam is cumulative, given during the final exam period as described in Schedule of Classes. Students must pass the Final Exam in order to pass the class.

Requirements: Book, Calculator, Class attendance; A working CUNY portal account and a valid email address in the college eSIMS. The book is a requirement because almost all the assignment and quizzes will be done online on MyMathLab website, so you need the book and the code in order to register. The

Steps to register will be given in details on the attached flyer to the syllabus. The instructor course ID **restrepo80901** log on to www.coursecompass.com then register as student then look the course ID and you will be registered.

Academic Integrity: Any attempts at academic dishonesty will be dealt with in an official manner as outlined in the York College "Academic Integrity Policy and Procedures" guidebook found on the York College webpage (see: <http://www.york.cuny.edu/president/legal-compliance/legal-affairs/cuny-legal-policies-procedures/Academic-Integrity-Policy.pdf/view>).

No use of cell phone or any communications device during class and exam hours; No cheating, no act of plagiarism in any forms or media. Students are required to follow the CUNY policy on academic integrity, which is available on the York college site above.

Course Evaluations: Student evaluations of teaching will be given to the class, collected from the class and taken to the office of public safety by a student who is registered for the class. No faculty members may be present in the room during the entire process.

ABS/INC Grades: A student who, because of extenuating circumstances, has not taken the final examination and/or completed the work for the course, and has a passing average may, at the discretion of the instructor, receive an INC grade. The student, in consultation with the instructor, has up to 10 weeks in the subsequent semester to complete the work and have the grade resolved even if not registered in the subsequent semester.

Accommodations for Students with Disabilities: Services are available to students with disabilities. Such services include "reasonable accommodations" that a student may require to have a successful academic experience. Students interested in more information should contact a counselor in room AC-1G02.

Additional Help: Additional help is available at the Mathematics Learning Center located in 3E07.