MATH 235
Finite Mathematics
Fall 2013

Time:       Tuesday & Thursday 7:15pm to 9:50pm
Place:      MSA 102 (Section 4497)
Instructor: Rex Perez
E-Mail:     rexeperez@gmail.com
Office Hours: Tu Th 6:45 - 7:10pm

Syllabus

Required Text

Prerequisite:
Mathematics 125 or 128 with a grade of "C" or better, or appropriate placement level demonstrated through the mathematics assessment process.

Course Description:
This course covers finite mathematics consisting of sets, graphing, linear programming, vectors, matrices, linear systems, combinations, probability, statistics, game theory and Markov chains with emphasis on applications to business and social sciences.

General SLO — Student Learning Objectives
A.) Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.

B.) Quantitative Reasoning: Identify, analyze, and solve problems that are quantitative in nature

C.) Technical Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs.

D.) Apply quantitative thinking processes using basic mathematical operations to solve common academic, workplace, and family problems. (Theme: mathematical operations)

E.) Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)

F.) Select appropriate math strategies for solving and handling real life problems involving finance, economics, and family issues. (Theme: mathematical problem-solving)
Specific Learning Objectives

- the students will be able to solve a linear programming problem using the geometric approach.
- the students will be able to solve a binomial probability distribution problem.
- the student is able to think logically
- the student is able to reason and recognize patterns and be able to make conjectures
- the student is able to create, read, and interpret graphs, charts, histograms, and diagrams
- the student is able to perform operations on matrices and apply them
- the student is able to perform set-theoretic operations and understand their applicability to surveys
- the student is able to collect, organize, and represent data, and be able to recognize and describe relationships
- the student is able to understand and use the basic measure of central tendency
- the student is able to understand and use the language of probability
- the student is able to compute the probabilities of composite events using the basic rules of probability
- the student is able to understand the significance of statistics and probability in the real world
- the student is able to understand the significance of the connection between logic and sets and their applicability to the real world
- the student is able to understand the significance of the connection between linear algebra and probability
- and their applicability to the real world
- the student is able to understand the significance of the connection between statistics and probability
- and their applicability to the real world
- the student is able to understand the concept of approximation, quantities, estimation, error, precision, and accuracy in interpreting the results of such measurements
- the student is able to understand the role of numbers as a logical, predictable system for expressing and relating quantities in analyzing and solving problems in the real world
- the student is able to demonstrate several approaches to basic problem solving and implement those strategies
- the student is able to acquire, organize, and synthesize information and creatively use that information
- the student is able to understand and appreciate the significance of the interconnection between areas of mathematics (especially applied finite mathematics) and their applicability to the real world
Course Layout & Grading

Quizzes 2%
Homework 8%
Exams 3 55%
Final 1 35%

Grading:
90%-100% A
80%-89.99% B
70%-79.99% C
60%-69.99% D
less than 60% F

Course Work

Quizzes: There will be quizzes given throughout the course. Some will be announced ahead of time; some will be pop-quizzes. There will be no make up quizzes.

Homework: It is very important to do your homework. This is a form of practice for your quizzes and exams. Also, they are worth 8% of your grade. Homework will be collected each Exam Day.

Exams: There will be 3 exams accounting for 55% of your grade. There are no make-up exams. They will be on Thursday September 19th, Thursday October 24th, and Tuesday November 26th.

Final: Tuesday December 10th.
The final will be cumulative and worth 35% of your grade. You need to take the final in order to pass the class.

Miscellaneous Information:

Calculator: You will need at least a scientific calculator. I strongly recommend a graphing calculator like TI-83plus or TI-89 or TI-92 if you will be taking more math courses such as calculus or statistics. You will also need access to Excel.

Absences: More than 3 absences may result in the student being dropped from the class. Each time you are late or leave early from class or lab will count as a ½ of an absence.
Accommodations: Academic accommodations are available for students with disabilities. Please identify yourself to your instructor and/or to Disabled Students Programs and Services staff so that the appropriate accommodations can be ensured. If you suspect that you have a learning disability, or require services for any other type of disability, see Disabled Students Programs and Services.

Course Conduct

**Positive learning environment.** Always be polite, kind, courteous and respectful to every person in the room.

I encourage you to study together and to discuss the material in a group but I expect everybody to hand in their own work and solutions.

**I do not tolerate cheating.** This goes for homework, quizzes and exams.

Success in Course

It is important to show up to class on time and to be prepared. You will better understand the lecture by doing the required reading and homework before hand. I cannot stress enough the importance of staying on top of your work. Please attend all the classes and ask questions. I am here to help you do well.

**Important Dates, Holidays and Breaks**

LAST DAY TO
Recency Petitions ............................................... Fri, Aug 16
Third Attempt Petitions ..................................... Fri, Aug 16
Add/Audit traditional classes
online ............................................................... Sun, Aug 25
in-person ............................................................. Fri, Sept 6
Drop classes with a refund/no fee owed .......... Fri, Sept 6
Drop classes w/o a "W" ........................................ Fri, Sept 6
Drop classes with a "W" ...................................
Fri, Nov 15
File for Pass/No Pass
(formerly "Credit/NoCredit")
........................................................................ Fri, Sept 6
GRADUATION PETITION ACCEPTED

.................................................................
APRIL 29 – NOV 15
COLLEGE IS CLOSED
Labor Day .......................................................... Sept 2
Veterans .............................................................. Nov 11
Thanksgiving Holiday ..................................... Nov 28-29
Thanksgiving Holiday (Non Instruction) ...... Nov 30 - Dec 1

** It is the student’s responsibility to observe deadline dates. Failure to drop classes may result in a "W" or "F" on your academic records and/or unwanted fees.