Syllabus BA 39 Finite Mathematics

**Course Syllabus**
(Tentative)

**BA 39 50034 & 50035 Finite Mathematics**

**Instructor:** Mike Sorensen Email: mike.sorensen@reedleycollege.edu
**Office:** BUS 40 Phone: (559) 494-3000 Ext. 3615

**Office Hours**: Monday, Wednesday, Friday 8:00-9:00
Thursday 8:00-9:00 Virtual Office Hour Call (559) 634-0941

**Text:** Finite Mathematics with Applications, 12th Edition Lial & Hungerford
ISBN: 9780134767611

This is a link to the publisher's website.  You can get an electronic version of the textbook at this site.

[https://www.pearson.com/en-us/subject-catalog/p/finite-mathematics-with-applications-in-the-management-natural-and-social-sciences/P200000006261/9780137554874Links to an external site.](https://www.pearson.com/en-us/subject-catalog/p/finite-mathematics-with-applications-in-the-management-natural-and-social-sciences/P200000006261/9780137554874)

**Student Learning Outcomes:**

1. Solve applied problems in finance including simple and compound interest, future and present value, annuities, sinking funds, and amortization.

2. Find unions, intersections and complements of sets and use Venn diagrams to solve problems.

3. Find the inverse of a square matrix and use the inverse to solve a system of linear equations.

4. Solve a system of linear equations using Gauss-Jordan elimination and interpret the results.

5. Apply linear and exponential graphs and functions.

6. Write a system of linear equations to solve applied problems.

7. Find the conditional probability of an event.

8. Solve linear programming problems in at least three variables.

9. Determine the probability of a specified event.

10. Apply basic combinatorial principles to enumeration problems.

**Objectives:**

This course is intended to develop an appreciation for and an interest in studying and understanding the theory and applications of finite mathematics used to solve problems in accounting, management, and information systems. This course will emphasize the application of the following topics to business problems:

• Functions: applications and graphing • Linear Equations • Systems of Equations and Matrices • Linear Programming • Mathematics of Finance • Set Theory, Counting Principles, and Probability • Rates of Change and Expected Value • Derivatives (Power Rule)

**Grading:**
Your final grade will be dependent on exams, quizzes, homework, and participation.
There will be no opportunity for extra credit.

Exams and quizzes 70%
Homework 30%

**Final grades will be based on the following scale:**

90%-100% A
80%-89% B
70%-79% C
60%-69% D
Below 60% F

**Classroom Behavior:**
Cellular phones must be turned off. You must bring a calculator to the exams.  I will not allow cell phones to be used as calculators during exams.

**Attendance:**
Your education is preparing you for a career in the business field. There is no such thing as an excused absence in business. Therefore, excessive absences will not be tolerated. If you are absent more than four class meetings your grade may be reduced by one letter grade. Continued absences beyond four meetings may result in being dropped from the class. If you know that you must be absent for a class meeting, please tell me at the class meeting prior to your absence.

**Tardiness:**
Just as you can not be late to work you can not be late to this class. If you are tardy for more than four class meetings your grade may be reduced by one letter grade. If you know that you must be late to a class meeting, please tell me at the class meeting prior to your tardiness.

**Accommodations for Students with Disabilities**
If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 or the Rehabilitation Act, please contact me as soon as possible.

Last day to drop this course: March 10, 2023