

In Math 1090, students learn how to:

- Analyze and graph quadratic, exponential and logarithmic functions;
- Solve rational, quadratic, exponential and logarithmic equations.
- Find solutions to linear programming problems, to maximize a function over a geometric region.
- Solve systems of linear equations in 2 and 3 variables and systems of quadratic equations. Use matrices to solve systems of linear equations.
- Perform simple matrix algebra computations.
- Understand what an inverse function is and be able to find the inverse function, when it exists. Perform function composition.
- Use linear, quadratic, exponential and logarithmic functions to model situations, in particular business situations (for example cost, revenue, profit, break-even values and equilibriums). Use techniques for solving equations and systems-of-equations to answer questions about these situations.
- Perform calculations about simple and compound interest, future and present value of annuities, and loans and answer related questions. In particular, determine which formula is appropriate for a given situation.