

## Mathematics Link

Quantitative Literacy is an important component of a strong liberal arts foundation. The following courses have been approved to meet the mathematics requirement and students are encouraged to take them within their first two semesters at UT. Note that many majors require a specific mathematics course and that course can be used to fulfill the Spartan Studies math requirement as well. If a student does not have a math requirement in their major, they are encouraged to take MAT 155 or MAT 160. All mathematics courses are 4 credits.

### *MAT 155 Finite Mathematics for Liberal Arts*

Appropriate as the mathematics requirement for liberal arts students. Topics include Social Choice (voting, fair division, and apportionment), Management Science (graph theory), Financial Mathematics and Probability and Statistics (probability and odds, five number summaries and standard deviation, normal distributions and linear regression).

### *MAT 160 College Algebra*

Topics include functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities and matrices.

### *MAT 170 Precalculus*

This course covers exponential and logarithmic functions, trigonometric functions, analytic trigonometry, applications of trigonometric functions and polar coordinates.

### *MAT 201 Introduction to Statistics*

An introduction to descriptive and inferential statistics, with applications in various disciplines using statistical computer software.

### *MAT 225 Calculus for Business*

This course is designed to provide students with the fundamental components of differential and integral calculus, with a particular emphasis on those aspects of calculus that have applications to business. The course covers exponential and logarithmic functions, limits, differentiation and differentiation techniques, applications of the derivative (e.g., marginal cost, marginal revenue, rate of growth), anti-derivatives, the integral as an area, functions of several variables and partial derivatives.

### *MAT 260 Calculus I*

Covers limits, continuity, differentiation, applications of derivatives, integration and integration by substitution.

### *MAT 261 Calculus II*

Covers integration techniques and applications, parametric and polar curves, sequences and infinite series.