

Applied Mathematics 20S

Credit Value: 1.0

Pre-requisite: Math 10F (*recommended higher than 60%*)

Course Description:

Students must have a graphing calculator for this course.

This course is one of two curricula available for students planning to pursue post-secondary studies in Mathematics and Science. This curriculum is particularly directed to students planning to enter Science, Engineering or the high-tech world of work. (Pre-Calculus Mathematics 20S is the other.)

Applied Math is data-driven. Students collect data in experiments and activities, and develop mathematical concepts from analyses of that data.

Components of curriculum emphasis:

- a) Technical communication
- b) Use of technological equipment such as calculators, graphing calculators and computers
- c) Use of spreadsheets
- d) Specialized measuring devices, including micrometers and calipers

Students are expected to work both individually and in small groups and to demonstrate responsibility, flexibility and independence in their learning. It is expected that students complete one major project each term that is done outside of classtime.

Core Topics:

- a) Use of Spreadsheets
- b) Technical Communication
- c) Exploring Mathematics Using Technology
- d) Linear Models and Patterns
- e) 2D/3D Projects
- f) Relations and Functions
- g) Co-ordinate Geometry
- h) Measurement Technology
- i) Trigonometry
- j) Data Management