

# MATH PROF/TECH (MTHPT)

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## Courses

### **MTHPT-010 ARITHMETIC /PRE-ALGEBRA 3 Credits**

This course is designed to provide students with a solid foundation in those areas of arithmetic and pre-algebra that will be encountered in MTHPT-103: Applied Algebra. While this course is specifically designed to meet the needs of students enrolled in the Technical & Industrial and the Business Technology & Service programs, students in other programs are welcome, space permitting. The course utilizes algebraic concepts to review the basic operations with the learning process adapted to the adult learner. Major topics include a review of arithmetic, fractions; decimals; percents; signed numbers; scientific notation, introduction to unit conversions, and an introduction to algebra. The emphasis will be on working problems that have practical applications in the real workplace.

### **MTHPT-103 APPLIED ALGEBRA 3 Credits**

Provides students with a review of pre-algebra, and includes problem-solving techniques, estimating, measurement, data handling, and the use of algebraic formulas to solve problems in the workplace. Additional mathematical topics include quadratic equations, systems of linear equations, geometry and geometric solids, as well as right and oblique triangle trigonometry. Pre-requisite: A grade of 'C' or better in MTHPT-010, MTHPT-012, or MATH-015 or satisfactory math placement. Course fee.

### **MTHPT-103P SUPPLEMENTAL INSTRUCTION FOR MTHPT 103 1 Credit**

This course is designed to support students in those areas of pre-algebra and algebra that will be encountered in MTHPT-103: Applied Algebra. Possible topics are a review of arithmetic, fractions, decimals, percents, signed numbers, scientific notation, unit conversions, and an introduction to algebra. Pre-requisite: This course must be taken concurrently with MTHPT-103.

### **MTHPT-130 FINITE MATHEMATICS 3 Credits**

Systems of linear equations and inequalities, elementary matrix algebra, introduction to linear programming, elementary discrete probability and statistics. Emphasis on applications to business, economics and social sciences. Pre-requisite: MATH-025, or MTHPT-103, with a grade of 'C' or better, or have satisfactory Math placement score.

### **MTHPT-137 MATH FOR TECHNOLOGY 4 Credits**

This course fulfills the skills component of the General Education core and provides students with a solid foundation in those areas of algebra, geometry, and trigonometry which are currently pervasive in technical and industrial technologies. Mathematical topics include Cartesian coordinate system, representations of lines, and functions of one or more independent variables, polynomial, radical, exponential, and logarithmic equations, matrix algebra, and systems of equations, radian and degree measure, right-angle trigonometry, law of sines and cosines, and vectors in applied settings, probability theory, and statistics. This course will emphasize technical applications. Pre-requisite: A grade of 'C' or better in MATH-025, MTHPT-103 or satisfactory math placement.

### **MTHPT-153 STATISTICAL REASONING 3 Credits**

This course introduces students to problem solving and decision making using single and multivariable statistical models. The course focuses on conceptual understanding of randomness, variability, statistical models, and inference through exploration of data. The use of technology for analysis of data is integrated throughout. Topics include descriptive statistics, probability, hypothesis testing, confidence intervals, likelihood ratios, correlation, and regression. Pre-requisite: A grade of 'C' or better in MATH-023, MATH-025, or MTHPT-103 or satisfactory math placement.

### **MTHPT-190 DIRECTED STUDY IN MATHEMATICS 1-6 Credits**

### **MTHPT-191 WORKSHOP IN MATHEMATICS 1-6 Credits**

### **MTHPT-192 SPECIAL TOPIC IN MATHEMATICS 1-6 Credits**

### **MTHPT-290 DIRECTED STUDY IN MATHEMATICS 1-6 Credits**

### **MTHPT-291 WORKSHOP IN MATHEMATICS 1-6 Credits**

### **MTHPT-292 SPECIAL TOPIC IN MATHEMATICS 1-6 Credits**

### **MTHPT-390 DIRECTED STUDY IN MATHEMATICS 1-6 Credits**

### **MTHPT-391 WORKSHOP IN MATHEMATICS 1-6 Credits**

### **MTHPT-392 SPECIAL TOPIC IN MATHEMATICS 1-6 Credits**

### **MTHPT-490 DIRECTED STUDY IN MATHEMATICS 1-6 Credits**

### **MTHPT-491 WORKSHOP IN MATHEMATICS 1-6 Credits**

### **MTHPT-492 SPECIAL TOPIC IN MATHEMATICS 1-6 Credits**