Course and Number: MATH 1010 – Math for Business Apps  Credits: 4  Class Hours Per Week: 4
Prerequisites: DEV 0115 with a “C” or better, or placement by COMPASS or ACT test

COURSE DESCRIPTION: Percents and the percent formula; units of measurement; scientific notation; gross earnings; FICA and withholding; markup and markdown; simple and compound interest; simple discount notes; loan amortization; depreciation and inventory; fundamentals of geometry; introduction to descriptive statistics, modeling with data and probability. Emphasis on applications.

SPECIAL COURSE REQUIREMENTS: None

LEARNING OUTCOMES:
• Recognize, identify and perform calculations utilizing units of measurement, convert between metric and standard English units and use standardized units and scientific notation to solve problems.
• Apply formulas and geometric concepts from plane and solid geometry to solve problems involving length, area, volume and surface area.
• Formulate and solve problems using percentages.
• Calculate and interpret basic measures of central tendency and variation and construct and interpret statistical graphs. Formulate, solve and communicate the solutions to problems based on collected data and graphical representations.
• Use the mathematics of retail to calculate trade discounts, cash discounts, markdowns, markups and markup rates.
• Use accounting mathematics to calculate and solve problems involving gross wages, payroll deductions, depreciation and inventory.
• Calculate and solve problems involving sales tax, property tax, simple interest, simple discount, compound interest, effective rates and annual percentage rates. Use consumer mathematics to calculate finance charges for installment loans and open ended credit terms. Use mortgage tables and compound interest formulas to calculated mortgage payments, total interest and amortization values and standard mortgage qualifying ratios.

GENERAL EDUCATION GOALS: This course addresses the following Columbus State general education goals:
• Critical Thinking
• Quantitative Skills

TEXTBOOK, MANUALS, REFERENCES, AND OTHER REQUIRED MATERIALS:
• My Math Lab/Course Compass – (included with purchase of a new text).
• A TI-30 or an equivalent scientific calculator is required.

UNITS OF INSTRUCTION:
• Units of Measurement
• Geometry
• Percentages
• Basic Statistics
• Mathematics of Retail: Trade Discounts
• Mathematics of Retail: Markups and Markdowns
• Accounting Mathematics: Payroll
• Accounting Mathematics: Depreciation
• Accounting Mathematics: Inventory
• Consumer Mathematics: Simple Interest
• Consumer Mathematics: Installment Loans And Open-Ended Credit
• Consumer Mathematics: Compound Interest
• Consumer Mathematics: Mortgages
• Consumer Mathematics: Taxes

GENERAL INSTRUCTIONAL METHODS: Lecture, discussion, demonstration, exploration and discovery exercises with the use of visual aids, graphing calculators, and/or computer resources.

STANDARDS AND METHODS FOR EVALUATION:
The final examination should weigh between 25% and 30% of the final course grade. The remainder of the grade is to be determined by the instructor, subject to the following departmental policies:
• Award NO CREDIT for attendance and/or class participation.
• Award NO CREDIT for assignments that are checked for completion, but not graded for accuracy. (i.e. giving points for doing homework, but not grading the problems for correct answers.)
• Limit points awarded for graded out-of-class assignments to 25% of the total grade for the course. This includes, but is not limited to group work, which by itself can account for no more than 3% of the total grade for the course.
• Eliminate extra credit assignments, or limit them to no more than 2% of the overall grade for the course.

GRADING SCALE:
Letter grades for the course will be awarded using the following scale:
> 90% - A  80-89% - B  70-79% - C  60-69% - D  < 60% - E
Grades will not be curved, skewed, or otherwise inflated.