
COURSE NUMBER:	MAT 155
COURSE TITLE:	Contemporary Mathematics
LECTURE HOURS PER WEEK:	3.0
LAB HOURS PER WEEK:	0.0
CREDIT HOURS PER SEMESTER:	3.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

COURSE DESCRIPTION

This course includes techniques and applications of the following topics: properties of and operations with real numbers, elementary algebra, consumer mathematics, applied geometry, measurement, graph sketching and interpretations, and descriptive statistics.

COURSE COMPETENCIES

Module 1: Properties of and Operation with Real Numbers

- Evaluate numerical expressions containing exponents, fractions, and decimals.
- Convert numbers from decimal notation to scientific notation and vice versa.
- Perform calculations with scientific notation.
- Solve applied problems involving integers, rational numbers, irrational numbers, and scientific notation.

Module 2: Elementary Algebra

- Evaluate algebraic expressions using the order of operations.
- Solve linear equations in one variable.
- Solve application problems involving linear equations in one variable.
- Graph linear equations.
- Evaluate a formula.
- Solve a formula for a specified variable.
- Construct ratios and solve proportions.

Module 3: Consumer Mathematics

- Solve application problems involving proportions.
- Solve application problems involving percent.
- Solve application problems involving simple and compound interest.

Module 4: Measurement and Applied Geometry

- Convert within and between the customary and metric systems.
- Convert between degree Celsius and Fahrenheit.
- Define and calculate the measures of supplementary and complementary angles.
- Determine angle measures from parallel lines cut by a transversal.
- Solve right triangles using the Pythagorean Theorem.

- Solve similar triangles.
- Calculate perimeter, area, and volume of geometric figures.
- Calculate the circumference and area of a circle.

Module 5: Descriptive Statistics

- Construct and interpret a frequency distribution.
- Construct and interpret statistical graphs.
- Calculate and interpret mean, median, mode, range, and standard deviation.

MINIMAL STANDARDS

An average of 60% is required for a grade of D for this course. Some programs may require a 70% average which is a grade of C.

COURSE REQUIREMENTS

See York Technical College Catalog and Handbook for attendance, withdrawal, and student conduct policies.

EVALUATION STRATEGIES/GRADING

The final course grade will be determined by a student's performance on the five modules listed below. Each module grade may be comprised of objective and/or essay type questions, homework, individual or group projects, quizzes, etc., as required by the instructor. The modules will be evaluated as follows:

Module 1: 20%	Grading Scale
Module 2: 25%	A = 90 – 100
Module 3: 15%	B = 80 – 89
Module 4: 25%	C = 70 – 79
Module 5: 15%	D = 60 – 69
	F = below 60

ENTRY LEVEL SKILLS

The student entering this course must be able to perform basic arithmetic and algebraic operations.

PREREQUISITES: MAT 150 with a minimum grade of C or MAT 032 with a minimum grade of C if MAT 032 was taken after Summer 2010.

CO-REQUISITES: None

Disabilities Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Offices (SR) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.