Minnesota State University Moorhead

MATH 127C: College Algebra Supplement

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:
This course requires any of these eight prerequisites
MATH 090 - Elementary Algebra
MATH 090A - Elementary Algebra
A score of 19 on test ACT Math
A score of 460 on test OLD-SAT Math
A score of 510 on test SAT Math Composite
A score of 76 on test Accuplacer Elementary Algebra
A score of 255 on test Accuplacer NG Quantitative Reasoning
A score of 234 on test Accuplacer NG Advanced Algebra Functions

Corequisites: None

MnTC Goals: None

The course will provide prerequisite review and support for MATH127 College Algebra. This course is designed to support students concurrently enrolled in MATH127 by providing additional focus on MATH127 topics and just-in-time review of prerequisite topics.

Topics include review of properties of real numbers, functions, algebra of functions, inequalities, polynomials and factoring, rational expressions and equations, radical expressions and equations, quadratic functions and their graphs, solving quadratic equations, and exponential functions. As the MATH127 progresses, this corequisite will offer supplementary instruction for MATH127 topics.

B. COURSE EFFECTIVE DATES: 01/30/2020 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Topics include properties of real numbers, functions, algebra of functions, inequalities, polynomials and factoring, rational expressions and equations, radical expressions and equations, quadratic functions and their graphs, solving quadratic equations, and exponential functions.

D. LEARNING OUTCOMES (General)

1. Demonstrate understanding and knowledge of properties of functions, which include evaluation, domain and range, related equations, and basic operations.
2. Simplify, factor, and perform basic operations on algebraic expressions, including polynomials, rational and radical expressions, and complex numbers.
3. Solve linear, rational, and quadratic equations by symbolic methods, and solve linear inequalities.
4. Appropriately use forms and formulas, including quadratic formula, vertex formula, slope-intercept form, and point-slope form.
5. Graph linear, quadratic, absolute value, and square root functions; and graphically solve equations, including systems.
6. Solve application problems using linear and quadratic models.
7. Make connections and progress to College Algebra topics.
8. Learn good study habits and time management.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted