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| **Approved: June 2020** | **Effective: FALL 2020** |
| **MATERIAL TO BE COVERED** | **SECTIONS FROM TEXT** | **TIME LINE** |
| Algebraic expressions, operations with real numbers, graphic equations, linear equations, formulas, applications, exponents. | 1.1 - 1.6 | 6 Hours |
| Introduction to functions, algebra of functions, linear functions, equation of lines. | 2.1 - 2.5 | 6 Hours |
| Systems of linear equations in two and three variables with applications. | 3.1 - 3.3 | 4.5 Hours |
| Linear inequalities, compound inequalities, equations and inequalities with absolute value, linear inequalities in two variables. | 4.1 - 4.4 | 4 Hours |
| **\*\* CHAPTERS 1 - 4 SHOULD BE COMPLETED BY THE END OF WEEK FIVE \*\*** |
| Polynomial functions, multiplication and factoring of polynomials, polynomial equations with applications. | 5.1 - 5.7 | 6 Hours |
| Rational expressions, multiply, divide, add, subtract, complex rational expressions, polynomial division, rational equations, formulas and applications of rational equations. OPTIONAL: Synthetic Division | 6.1 - 6.4, 6.6, 6.7 Optional: 6.5 | 6 Hours |
| Radical expressions, simplify, multiply, divide, add, subtract, functions, rational exponents, radical equations, complex numbers. | 7.1 - 7.7 | 6.5 Hours |
| Quadratic equations, square root property, completion of the square, quadratic formula, quadratic functions and their graphs, equations quadratic in form, quadratic and rational inequalities. | 8.1 - 8.5 | 8 Hours |
| Exponential and logarithmic functions, composite and inverse functions, logarithmic properties, exponential and logarithmic equations, exponential growth, decay and modeling. | 9.1 - 9.6 | 8 Hours |
| Distance and midpoint formula, circles, ellipse, hyperbola, parabola, identifying conics, systems of nonlinear equations. | 10.1 - 10.5 | 6 Hours |
| Sequences, summation notation, Binomial theorem. | 11.1 & 11.4 | 4 Hours |

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| 5-unit class: hours total 72.5 (15 x 4 hours 50 minutes) – hours for exams + 2.5 hour finalThis outline allows for 5 hours of exams. |
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| Submitted by: Case, Chavez, Lai, Loyd, Peng, Rivas, Rivers, Takashima, Terreri, Troxel, Wakefield |  |

Math Department Policy can be found at: <https://www.mtsac.edu/math/departmentpolicy.html>